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TRANSACTIONS

OF THE

MEDICAL ASSOCIATION

OF THE

STATE OF ALABAMA.

THE STATE BOARD OF HEALTH.

ORGANIZED 1847—SESSION 1899.

MOBILE, APRIL, 18-21, 1899.

MONTGOMERY, ALA.
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PREFACE.

To the Members of the Medical Association
of the State of Alabama:

We herewith present you the volume of the Transactions of the Medical Association of the State of Alabama for 1899, which has been completed as early as is consistent with proper care.

Very respectfully,

GEORGE PLATT WALLER, M. D., Montgomery.
WILLIAM HENRY SANDERS, M. D., Mobile.
HENRY ALTAMONT MOODY, M. D., BAILEY SPRINGS.
Publishing Committee.

PROGRAMME OF THE ANNUAL SESSION,

April 18-21, 1899,

AT TEMPERANCE HALL, MOBILE, ALA.

COMMITTEE OF ARRANGEMENTS.

H. T. INGE, M. D., Chairman.

S. S. TAM, M. D. P. J. M. ACKER, M. D.
CHAS. MOHR, M. D. RHETT GOODE, M. D.

FIRST DAY—TUESDAY, APRIL 18, 1899.

MORNING SESSION.

1. Call to order at 12 M. by the President—H. A. MOODY, M. D., of Bailey Springs.
2. Prayer—Rev. G. C. TUCKER.
3. Address of Welcome—W. H. SLEDGE, M. D., President of Mobile County Medical Society.
4. Address of Welcome—Hon. J. C. BUSH, Mayor of Mobile.
5. Annual Message of the President—H. A. MOODY, M. D., of Bailey. Springs.
6. Report of Senior Vice-President—SAMUEL G. GAY, M. D., of Selma.
7. Report of the Junior Vice-President—SAMUEL H. LOWRY, M. D., of Huntsville.
8. Report of the Secretary—G. P. WALLER, M. D., of Montgomery.
9. Report of the Treasurer—H. G. PERRY, M. D., of Greenville.
10. Report of the Publishing Committee.
11. Report of Special Committees.
12. Miscellaneous Business.
    Adjournment.

EVENING SESSION

1. Call to order at 8 P. M.
2. Historian's Address—JOHN W. HEACOCK, M. D., of Alpine.

REGULAR REPORTS.

3. The Sanitation of Cities—GLENN ANDREWS, M. D., of Montgomery.
4. The Sanitation of Prisons—W. H. BLAKE, M. D., of Wetumpka.

5. Neuroses Sometimes Following Oophorectomy; their Duration and Treatment—W. E. B Davis, M. D., of Birmingham.
6. Antipyretics, their Uses and Limitations—T. H. Frazer, M. D., of Mobile.
7. Retention of the Testicle: with Reports of Cases—L. L. Hill, M. D., of Montgomery.
8. Field Surgery in Military Service—W. J. Kernochan, M. D., of Florence.

SECOND DAY—WEDNESDAY, APRIL 19.

Morning Session.

1. Call to order at 9 A. M.
2. Unfinished Business.

CONTINUATION OF REGULAR REPORTS.

3. The Surgical Treatment of Tuberculosis—Goldsby King, M. D., of Selma.

11:00 o'clock A. M.—SPECIAL ORDER.

4. Jerome Cochran Lecture—J. T. Searcy, M. D., of Tuscaloosa.
5. An Epidemic of Typhoid Fever near Bear Creek, Colbert County—G. T. McWhorter, M. D., of Riverton.
6. Recent Advances in Pediatrics—T. D. Parke, M. D., of Birmingham.

Adjournment.

Afternoon Session.

1. Call to order at 3 P. M.

CONTINUATION OF REGULAR REPORTS.

2. The Late Epidemic of Yellow Fever—W. H. Sanders, M. D., of Mobile.
3. The Epidemic of Small-pox in Jefferson County in 1897-98—W. H. Wilder, M. D., of Birmingham.
4. Miscellaneous Business.

Adjournment.

Evening Session.

1. Call to order at 8 P. M.
2. Monitor's Address—R. H. Duggar, M. D., of Gallion.
3. Annual Oration—G. C. Chapman, M. D., of Birmingham.

Followed by a reception tendered by the Faculty of The Medical College of Alabama, at the Manassas Club Rooms.

THIRD DAY—THURSDAY, APRIL 20.

Morning Session.

1. Call to order at 9 A. M.
2. Unfinished Business.

VOLUNTEER PAPERS.

1. Appendicitis—Geo. S. Brown, M. D., of Birmingham.
2. The Mind as an Etiological Factor in Disease, and its Potentiality as a Therapeutic Agent—E. T. Camp, M. D., of Gadsden.
3. Prophylactic Treatment of Tuberculosis—T. A. Casey, M. D., of Albertville.
4. My Experience with Yellow Fever—G. S. Chapman, M. D., of Jackson.
5. Treatment of Hypertrophy of the Prostate Gland—Charles M. Franklin, M. D., of Union Springs.
6. Subject to be announced—Rhett Goode, M D., Mobile.
7. Sanitary Conditions of some Tropical Ports and the Dangers Arising Therefrom—D. W. Goodman, M. D., Mobile.
8. Report of Cases of Appendicitis—J. A. Goggans, M. D., Alexander City.
9. Subject to be announced—G. Hartung, M. D., of Cullman.
10. Four Cases of Infantile Monstrosities in the Same Family—W. M. Hestle, M. D., of Beuna Vista.
11. Disorders of the Nervous System Due to Gynecic Diseases—R. S. Hill, M. D., Montgomery.
12. Subject to be announced—W. R. Jackson, M. D., of Mobile.
13. Cold Water in the Treatment of Typhoid Fever—J. N. Killough, M. D., Huffman.
14. Gastric Ulcer—W. W. Mangum, M. D., Georgiana.
15. Miscellaneous Business.

Adjournment.

Afternoon Session.

1. Call to order at 3 P. M.

CONTINUATION OF VOLUNTEER PAPERS.

2. A General Consideration of Serum Therapy—E. L. Marechal, M. D., of Mobile.
3. Reports of Surgical Cases—E. P. McCollum, M. D., Greensboro.
4. A Treatment for Tuberculosis Based on Physiologic Principles—J. F. Peavy, M. D., Ashville, N. C.

Adjournment.

Followed by boat ride on Mobile Bay, tendered by W. H. Sanders, M. D.

EVENING SESSION.

1. Call to order at 8 P. M.

CONTINUATION OF VOLUNTEER PAPERS.

2. Chronic Hypertrophic Rhinitis—H. S. PERSONS, M. D., Montgomery.
3. Membranous Croup—EDGAR RAND, M. D., Leighton.
4. Inguinal Hernia—E. P. RIGGS, M. D., Birmingham.
5. Epidemic Jaundice—CLARENCE RICE, M. D , Prattville.
6. Hæmorrhagic Malarial Fever—W. M. RYALS, M. D., Cowart's.
7. The X Rays as a Means of Diagnosis in Fractures; Report of Case—J. GREY THOMAS, M. D., Mobile.
8. Report of Two Interesting and Unusual Cases—E. W. TERRELL, M. D., Cullman.
9. An Epidemic of Jaundice—C. M. WATSON, M. D., Florence.
10. Eye Strain Due to Mascular Deficiency—R. A. WRIGHT, M. D., Mobile.
11. Miscellaneous Business.

Adjournment.

Followed by Lunch, tendered by "The Mobile County Medical Society."

FOURTH DAY—APRIL 21.

1. Call to order at 9 A. M.
2. Unfinished and Miscellaneous Business.
3. Report of Board of Censors.
4. Revision of the Four Rolls.
   (a) Revision of the Roll of County Societies.
   (b) Revision of the Roll of Counsellors.
   (c) Revision of the Roll of Correspondents.
   (d) Revision of the Roll of Officers.
5. Election and Installation of Officers.
6. Unfinished and Miscellaneous Business.
7. Adjournment *sine die*.

THE MINUTES OF THE PROCEEDINGS.

SESSION OF 1899.

PROCEEDINGS OF THE FIRST DAY.

MORNING SESSION.

The Association was called to order at 12 M. by the President, H. A. Moody, M. D.

The following Counsellors, Delegates and Visitors appeared and registered:

GRAND SENIOR LIFE COUNSELLORS.

Furniss, John Perkins, Selma, Dallas county.
Jackson, Walter Clarke, Montgomery, Montgomery county.
Ketchum, George Augustus, Mobile, Mobile county.
McKittrick, Adam Alexander, Evergreen, Conecuh county.
Michel, Richard Frazer, Montgomery, Montgomery county.
Sanders, William Henry, Mobile, Mobile county.
Total, 6.

GRAND SENIOR COUNSELLORS.

Bragg, Shirley, Montgomery, Montgomery county.
Brockway, Dudley Samuel, Livingston, Sumter county.
Gaines, Vivian Pendleton' Mobile, Mobile county.
Goggans, James Adrian, Alexander City, Tallapoosa county.
Hayes, Robert Hughes, Union Springs, Bullock county
Hill, Luther Leonidas, Montgomery, Montgomery county.
Huggins, Jacob, Newberne, Hale county.
Inge, Henry Tutwiler, Mobile, Mobile county.
Lowry, Samuel Hickman, Huntsville, Madison county.
Robertson, Thaddeus Lindlay, Birmingham, Jefferson county.
Searcy, James Thomas, Tuscaloosa, Tuscaloosa county.
Sholl, Edward Henry, Birmingham, Jefferson county.
Sledge, William Henry, Mobile, Mobile county.
Stovall, Andrew McAdams, Jasper, Walker county.
Thomas, James Grey, Mobile, Mobile county.
Wheeler, William Camp, Huntsville, Madison county.
Wilkerson, Wooten Moore, Montgomery, Montgomery county.
Total Grand Senior Counsellors, 17.

SENIOR COUNSELLORS.

Andrews, Glenn, Montgomery, Montgomery county.
Blake, Wyatt Heflin, Wetumpka, Elmore county.
Cameron, Mathew Bunyan, Sumterville, Sumter county.
Cunningham, Russell McWhorter, Pratt City, Jefferson county.
Gay, Samuel Gilbert, Selma, Dallas county.
Goode, Rhett, Mobile, Mobile county.
LeGrand, John Clark, Birmingham, Jefferson county.
Maréchal, Edwin Lesley, Mobile, Mobile county.
Whitfield, Bryan Watkins, Demopolis, Marengo county.
Wilkerson, Charles A., Marion, Perry county.
Total Senior Counsellors, 10.

JUNIOR COUNSELLORS.

Bondurant, Eugene DuBose, Mobile, Mobile county.
Brown, George Summers, Birmingham, Jefferson county.
Davis, William Elias Brownlee, Birmingham, Jefferson county.
Frazer, Tucker Henderson, Mobile, Mobile county.
Harper, Robert Franklin, Ozark, Dale county.
Henley, Albert Thomas, Birmingham, Jefferson county.
Hill, George Armstrong, Wynnette, Talladega county.
Hill, Robert Sommerville, Montgomery, Montgomery county.
Howle, James Augustus, Wetumpka, Elmore county.
Jones, Julius, Rockford, Coosa county.
Moody, Henry Altamont, Bailey Springs, Lauderdale county.
Perry, Henry Gaither, Greenville, Butler county.
Riggs, Edward Powell, Birmingham, Jefferson county.
Waller, George Platt, Montgomery, Montgomery county.
Total Junior Counsellors, 14.

DELEGATES.

Autauga County—M. D. Smith, Prattville.
Baldwin County—Sibley Holmes, Tensaw.
Barbour County—C. L. Guice, Harris; B. S. Warren, Clayton.
Bibb County—J. S. Moore, Six Mile.
Blount County—None.
Bullock County—W. S. Britt, Midway; C. M. Franklin, Union Springs.
Butler County—J. A. Kendrick, Greenville.
Calhoun County—A A. Greene, Anniston; B. D. Williams, Oxford.
Chambers County—None.
Cherokee County—R. H. McGehee, Round Mountain.
Chilton County—None.
Choctaw County—None.
Clarke County—A. S. Pugh, Grove Hill.
Clay County—C. S. Northen, Ashland.

Cleburne County—J. W. Kaylor, Arbacoochee.
Coffee County—N. M. Ham, Elba.
Colbert County—H. W. Blair, Sheffield.
Conecuh County—W. Watson, Repton.
Coosa County—A. J. Peterson, Hanover.
Covington County—None.
Crenshaw County—None.
Cullman County—G. Hartung, Cullman.
Dale County—None.
Dallas County—R. P. Chisholm, Summerfield; R. M. Cochran, Eleanor.
DeKalb County—C. W. Wright, South Hill.
Elmore County—O. S. Justice, Central; N. B. Sewell, Buyck.
Escambia County—S. C Henderson, Brewton; P. H. M. Tippins, Brewton.
Etowah County—None.
Fayette County—J. D. Young, Fayette.
Franklin County—None.
Geneva County—None.
Greene County—None.
Hale County—D. J. Castleman, Greensboro; E. P. McCallum, Greensboro.
Henry County—W. M. Ryals, Cowarts; W. H. Williams, Dothan.
Jackson County—None.
Jefferson County—J. T. Harwell, Ishkooda; E. P. Lacey, Bessemer.
Lamar County—D. C. Morton, Vernon.
Lauderdale County—None.
Lawrence County—None.
Lee County—None.
Lowndes County—None.
Limestone County—None.
Madison County—B E. Graham, Gurley; W. T. Pride, Madison.
Macon County—P. Reynolds, Warrior Stand.
Marengo County—A. L. Barron, Nanafalia.
Marion County—J. R. Burlison, Hamilton.
Marshall County—T. A. Casey, Albertville
Mobile County—P. J. M. Acker, Mobile; J. T. Inge, Mobile.
Monroe County—J. F. Busey, Jones' Mill; G. G. Scott, Mt. Pleasant.
Montgomery County—J. L. Gaston, Montgomery; L. D. Robinson, Montgomery.
Morgan County—F. B. Hunter, Falkville.
Perry County—S. T. Whitfield, Uniontown.
Pickens County—H. L. Williams, Dunbar.
Pike County—J. M. Watkins, Tarentum.
Randolph County—None.
Russell County—None.
St. Clair County—None.

Shelby County—None.
Sumter County—J. D. Bancroft, Sumterville.
Talladega County—S. W. Welch, Alpine.
Tallapoosa County—I. D. Nolen, New Site.
Tuscaloosa County—None.
Walker County—None.
Washington County—C. LeBarron, Yellow Pine.
Winston County—None.
Wilcox County—None.

Number of Counties sending Delegates 41
Number of Delegates present..... 54

VISITORS.

NAME.	RESIDENCE.	COUNTY.
Abe.nathy, W. L.,	Flomaton,	Escambia.
Barclay, J. W ,	Birmingham,	Jefferson.
Barnes, B. S.,	Suggsville,	Clarke.
Boykin, S. S.,	Portland,	Dallas.
Brassell., W. R.,	Montgomery,	Montgomery.
Caine, V. H.,	Central Mills,	Perry.
Chapman, G. C.,	Birmingham,	Jefferson.
Clarke, N. L.,	Mobile,	Mobile.
Curtis, J. M.,	Glendon,	Clarke.
Donald, J. M.,	Bridges,	Dallas.
Dowling, O.,	Mobile,	Mobile.
Festorazzi, A.,	Mobile,	Mobile.
Foshee, M.,	Brewton,	Escambia.
Glass, E. T.,	Birmingham,	Jefferson.
Henderson, W. T.,	Mobile,	Mobile.
Hendon, J.,	Mobile,	Mobile.
Jackson, W. R.,	Mobile,	Mobile.
Jeffrey, J. G.,	Whatley,	Clarke.
Johnson, O.,	Downing,	Montgomery.
Jones, J. D.,	Sweetwater,	Marengo.
Kendall, W. Q ,	Berlin,	Dallas.
Ledbetter, S. L.,	Birmingham,	Jefferson.
Letcher, J. B.,	Shorters,	Macon.
Matthews, E. A.,	Clanton,	Chilton.
May, J. T.,	Notasulga,	Macon.
Montgomery, A. H.,	Montgomery,	Montgomery.
Murray, R. D.,	Marine Hospital,	Mobile.
Newcomb, A. S.,	New York.	
Peavy, J. F ,	Asheville, N. C.	
Persons, H. S.,	Montgomery,	Montgomery.
Peters, R. H.,	Mobile,	Mobile.

Powell, C. W.,	Colquitt,	Montgomery.
Scales, W. W.,	Mobile,	Mobile.
Stephens, B. H.,	Lineville,	Clay.
Taylor, W. H.,	Central Mills,	Dallas.
Whitfield, C. B.,	Demopolis,	Marengo.
Wilder, W. H.,	Birmingham,	Jefferson.
Wright, R. A.,	Mobile,	Mobile.

Total number of visitors who registered 38

A number attended who failed to register.

SUMMARY.

Grand Senior Life Counsellors	6
Grand Senior Counsellors	17
Senior Counsellors	10
Junior Counsellors	14
Delegates	54
Visitors	38
Total	139

The Association was called to order promptly at 12 M., by the President, H. A. Moody, M. D., and opened with prayer by Dr. E. H. Sholl, of Birmingham.

The President then introduced Dr. W. H. Sledge, of Mobile, who delivered the following:

ADDRESS OF WELCOME.

Mr. President and Members of the
Medical Association of the State of Alabama:

In the name of the Medical Society of Mobile County I bid you cordial welcome to this beautiful city.

Your presence honors equally the profession and public. It is a rare and esteemed honor to have in our midst so many learned gentlemen who adorn the profession of medicine. By association and comparison of views our individual discoveries and theories in medicine may be weighed, analyzed and tested.

Obsrvation and experience, skillfully guided, are our wisest teachers.

The relief of humanity, primarily underlying our profession, has been leveled to the great purpose of protection to humanity. Problems of transcendent importance confront us in the continued growth and

multiplication of cities; in matters of scientific sanitation; in shielding our dwellings from the ever active disease germ; in the complicated relations to the public authorities; in questions of quarantine, to the end that immunity may be afforded to the citizen, and commerce be preserved when pestilential diseases invade our shores.

No heroism is grander than that evinced by the physician in his manifold sacrifices to alleviate suffering; in the sunshine and in the storm; in light and darkness; in sickness and in health, he enters the sick chamber, encourages the weak, supports the feeble, and soothes the dying. He must realize that man is wonderfully made; that health is his normal condition, and that whatever creeds, or schools recognize these fundamental truths are worthy of his closest study.

The conscientious physician must be tireless in his studies and his investigations. He must know his physiology, anatomy and materia-medica as he knows the alphabet; he must know the relation of man to nature; the effect of large associations of mankind upon health and disease; how climate is related to physical infirmities; how disease is modified by food, clothing, water and change of seasons; how the imperious will, and business, commerce, intercourse, control human maladies.

It is only by the stimulus of associations such as this that the larger problems which our profession must meet, can be solved.

We confidently indulge the hope that your deliberations may mark an era in our profession in the State.

We congratulate ourselves upon your presence here. We shall watch your proceedings with solicitous care. May they infuse into one and all a broader and deeper love for the noble profession of their choice.

Again I bid you welcome, thrice welcome to our city, to our homes and to our firesides.

ADDRESS OF WELCOME BY MAYOR J. C. BUSH.

Gentlemen of the Medical Association of
the State of Alabama:

Feeling a deep interest in all matters connected with the medical profession, and being honored as a Trustee of the Medical College of Alabama, I have a peculiar pleasure as Mayor of Mobile in welcoming you to our beloved city.

The purpose of nearly all conventions is for the good and well being of the people. They induce that liberty of thought and freedom of expression, by which wise conclusions are reached. In the free and intelligent discussions of the many interesting and scientific subjects presented, you will be charmingly entertained. The able essays read

in your hearing will afford food for thought and will almost monopolize your attention; still I desire you to know that our people are deeply interested in whatever advances the cause in which you are enlisted. Recalling the achievements and discoveries of the great men who have magnified your profession and repeating their names and sacrifices, may seem tiresome to dull ears—yet the names of Harvey and Jenner, with the study of their biographies, will always enthuse the medical student. The names of Pasteur, Koch and Sanarelli are household words in our age, and awaken the liveliest interest, as to the germ theory, and serum treatment.

Every sufferer is thankful and grateful beyond expression to the discoverers of chloroform and ether.

If these and other great men of your profession have done so much by constant study, and earnest application for the relief of human suffering, what may we not expect of scientific doctors of this age, with the accumulated knowledge of all these great men, and with the modern improvements in every line of therapeutics and surgery. Looking over this intelligent audience, may we not hope for yet grander achievements by some here present, who will immortalize themselves and our beloved State? When we think of the triumphs of the sciences in government and law, steam, chemistry, electricity, telegraphy and telephones, we can also ponder upon what medicine and surgery have done for suffering humanity and can point to the numerous hospitals for the treatment of diseases, and to the sanatoriums for the special treatment of the ear, eye and throat; asylums for the deaf, dumb, blind and insane, and the surgical institutions all over the land, and thus it is that medicine and surgery working together in the noble and grand cause of aiding human helplessness, outstrip all the other sciences.

"What nobler aim can man attain
Than conquest over human pain?"

You may not be able to heal by a single touch, yet you can imitate the Great Physician, by administering to the sick; for to the weary and depressed soul, the skillful physician brings comfort and good cheer, dispels his fears and so it may be well said, that the good doctor becomes a veritable angel in the home. All genuine articles have their imitations. The healing art is craved more than any other gift, and thus we hear of the "so-called divine healers" all over the land, they even as "Simon the Sorcerer," imagine it can be purchased with money. Quacks have existed since the days of Hippocrates, and will continue to the end of time. I know of no subject more fruitful for advice than the treatment of the sick. Everybody has a remedy, and every doctor knows how freely it is offered. He is advised both as to the treatment of the patient, and told of his opportunities of doing good in the home. None of us so well fulfill the

scriptural injunction to "visit the sick" as the doctor. While many are remiss in this duty, he rarely misses an opportunity.

I have in mind a grand and courtly doctor of large practice. I see him entering the sick chamber with his pleasant smile, calm, dignified and as much at ease as he would receive a guest in a drawing room. What a gift! How inspiring to the sick! I am sure that the faithful doctor should be the happiest of men. After the tiresome day when he recalls the scenes of affliction, conscious of real service to many, he can lie down to sleep as sweetly as a little child. Such faithful service should be a pleasure to him down to the boundaries of life, and will go with him to the Beulah Land. There are some physicians who in their quiet work pour out their hearts love upon those about them like the sweetest fragrance. So then gentlemen:

"If you keep one heart from breaking
You will not live in vain,
If you ease one life the aching,
Or cool one pain;
Or help one fainting robin to his nest again,
You will not live in vain."

THE ANNUAL MESSAGE OF THE PRESIDENT.

By Henry Altamont Moody, M. D., Bailey Springs.

Junior Counsellor of the Medical Association of the State of Alabama.

Gentlemen of the Medical Association
of the State of Alabama:

The Constitution of The Medical Association of the State of Alabama imposes upon the President of the association the duty of submitting a message at its annual session, and directs that it shall be devoted to "the discussion of the interests, objects, and business of the association." In fulfillment of that duty your President submits the following matters for your consideration:

The year that has passed since our last meeting has been one of great interest from every point of view, filled with historical events of magnitude, and pregnant with fate for the future of our country. In the drama and the tragedy of these events our profession has borne no inconspicuous part, its members rising to meet the requirements of every emergency no matter how great or how heroic the effort demanded. Seldom, if ever before in history, has so large a corps of army surgeons been drawn from civil life in so short a period of time, and though instances of incompetency and unworthiness inevitably occurred under a stress of haste, they were wonderfully exceptional. Neither should it be forgotten that from the physician or surgeon of to-day much more is demanded than was ever before expected. The record made by our doctors, young and old, who left all and dared all to serve their country should be an example

and an inspiration to our entire profession, and a source of pride to every one of its members. Their devotion and heroism on the field of battle, or in the still more deadly fever camp roused the admiration of all, and has been cordially praised by the public press, and by the officers and men with whom they served. The sacrifices made by many of these servants of God and country in thus abandoning their regular work for the sake of patriotism and humanity, are almost incredible. Men whose practice paid them every month more than the government would pay them in a year worked side by side with younger doctors who had left newly occupied "locations" half won and unguarded.

Their patriotism and efficiency have added new luster to our exalted profession, and the results of their brief but crowded experience will enrich the treasures of our medical and surgical knowledge to an extent that it will require years to fully utilize. The very complaints made against the service in some places serve only to illustrate the increase of knowledge we are expected to possess. Thirty years ago who would have thought of blaming the medical department because typhoid fever ravaged the regiments? To-day that is almost the only complaint made against that department, and though it has been shown that the trouble lay in the disregard of instructions promulgated by the Surgeon-General, the fact that so much was expected indicates that the public is no longer willing that a convenient Providence shall be blamed for evils which medical science claims are avoidable. As we pierce deeper and deeper into the secrets of nature, devoting each new discovery to the service of humanity, we are unconsciously assuming a position of greater trust and responsibility in the social organization.

To-day no man or woman preparing for missionary work among the heathen considers an equipment complete unless it embraces a practical knowledge of medicine, thus enabling them the better to follow in the footsteps of their Master, who ministered to the diseases of the body as well as those of the soul.

One object of the association, as stated in our organic law, is to encourage a high standard of medical education, and regulate the qualifications of practitioners of medicine in this State. To any one who was acquainted with the average attainments of the Alabama doctor at the time this Association was organized, the immense improvement manifest to-day is astonishing. Young men, conscious only of what they see, recognizing the desirability of further improvement, ignore all that has been accomplished and make an ill considered outcry for change. They are sincere, their motives are worthy, and their longing for perfection is laudable. "They mean well, but they don't know." They are not aware of the fact that the standard of requirements, as evidenced by the documents sent up by county boards of examiners from all over the State, is constantly advancing. They are not aware that the most faulty examination conducted in 1898 would be classed, even by themselves, as far above the average of those received ten years ago. They do not realize that to make haste slowly is the part of wisdom and the passport to final success. With the impatience of youth and inexperience they chafe at the slow progress of a great reform in spite of its having demonstrated its efficiency, and its steady growth towards the longed for goal. This leads them to contend for immediate action in directions which those of far greater experience and observation, and much better qualified to judge, unhesitatingly pronounce inexpedient and unwise. Whatever may be the objections

to county boards of examiners they are, at present, far outweighed by their advantages; and though this is not the proper place for an elaboration of the matter, the position here taken is easily demonstrable to any one whose judgment is not clouded by pride of opinion, or prejudice. The standards of requirements are steadily advancing in every county, until some of them might be thought actually to have passed the boundaries of necessity or usefulness in their demands. Sneers have been cast upon the suggestion that our present system of examinations results in an improvement of the medical examiners themselves, but sneers are not arguments that can successfully contend with solid and visible facts. The questions asked by examiners are as much an evidence of their qualifications as are the answers of applicants of theirs. It is an easy matter to tell which are merely copied from a book, and which are selected and modified as a result of thoughtful study. The papers sent up to-day show as much improvement on the part of the examiners as is evidenced by the applicants. It is not difficult for gentlemen to understand how this is effected. The examiner, especially if he be one of our older members, realizes that if he is to do justice to the trust he has assumed he must qualify himself to judge of the merits of men fresh from lectures, clinics, museums, and laboratories. Thus he receives an additional impetus to study; and books and magazines are at the service of all who will pay for them. Many a graduate who went into the examination room with a supercilious confidence in his up to date training has come out with a new feeling of respect for the old doctor who could ask such searching, yet practical questions. Even the difference of standards in different parts of the State is not an evil entirely devoid of usefulness. Though there are good reasons for regretting it, there are also

unanswerable ones, based on inevitable conditions, that tend to modify an adverse judgment.

The efforts of our association to elevate the standard of medical requirements have also been signally successful in another direction. The grade of teaching in all medical colleges whose graduates must pass a subsequent examination, has been gradually raised. No college can long afford to have any appreciable number of its graduates rejected by county boards, or by any other authorized examiners.

As the requirements of these examiners have been gradually advanced, those of the colleges have kept pace with them. A few years ago our southern colleges extended their required course of collegiate study from two years to three. The indispensable elements of a medical education are so rapidly increasing in scope and number that even that length of time is found insufficient for satisfactory preparation, and henceforward not less than a four years course of study in a reputable medical college will be acknowledged as entitling students to apply for graduation. It is instructive, especially to those who believe no good thing can come from their own State, to scan the records of examinations reported in the volume of transactions for last year. The percentage of rejections was larger than heretofore; yet though your Alabama schools supplied over one-third of all the applicants, only one such graduate failed to satisfy the requirements of either State or county boards. This gratifying result was not due to chance or favoritism. It was the natural fruit of hard, tireless, honest work on the part of both teachers and pupils. Many of our older physicians, and almost all of the laity, fail to realize the extent of recent advances in medicine, and the consequent increase of study demanded of its students. No other profession requires so much of its members. The

range of distinct and separate studies it demands is not equalled by the curriculum of any other art, trade, or profession. There is a fashion of saying that more work should be done, more preparation required; but it is only a fashion. Those who look over the questions asked by boards of examiners, and remember that they do not begin to comprise all the subjects insisted upon by every reputable college, know that there is more danger of too much than too little being demanded. Some means must be adopted to insure better preliminary education than is at present the rule, but even in that respect the improvement is so marked from year to year as almost to amount to a revolution.

Much good would be accomplishd if physicians everywhere would advise young men to secure at least a good english education before undertaking the study of medicine; and at least one year of latin would be an additional advantage of great value.

Experience proves, however, that the habits of study acquired by graduates of literary institutions are invaluable to those who afterwards pursue professional work, and it would be fortunate if all medical students could have such preliminary training.

The foundation of all this improvement in preparation for the professional life is in the post graduate examinations, whether by State or county boards. In view of all that has been accomplished how short sighted is he who can see only the faults of our present system. In addition to the good above cited the duty of examining candidates for license to practice is one of the strongest ties that bind the county societies together. In them lies the strength of our organization. Upon their active support hangs all the usefulness of which we are capable. Few of them are dominated by large towns or cities, and most of them are composed of that

country membership which is the backbone of the association. It would therefore seem unwise to unnecessarily do anything that might lessen their interest or weaken their loyalty.

In this connection it may not be amiss to consider another exaggerated notion which is widely prevalent. We constantly hear it stated that the medical colleges are turning out so many doctors that they are crowding each other, and that the resulting competition is ruinous to the standing of the profession. Like many other widely accepted notions this one is only partly true. If we are to base such a belief only upon the number of doctors living in cities and large towns the statement would seem to be substantiated. We must remember however, that but a small proportion of the citizenship of this part of our country is urban, the great majority living in the country districts.

Doctors who prefer to reside in cities must meet the inevitable competition which the advantages and rewards of successful city practice invite. If one-fourth of such physicians were to desert their posts this year their places would be immediately filled by doctors who would move in from the country. It is only by studying the statistics of the entire State that we can arrive at anything like a correct conclusion concerning the overrecruiting of our ranks. Looking at the matter from this point of view we find that the Transactions of 1898 report nearly eighteen hundred doctors in Alabama. The number of deaths recorded among them was thirty. There can be no doubt that throughout the State not less than thirty other doctors abandoned the practice, some on account of age or infirmity, some because of ill health, and some, no doubt, for the reason that they found other and more remunerative business. These two classes added together give us a total of about

sixty who no longer practiced their profession. Meanwhile the population is constantly increasing, by birth and by immigration. If we are to maintain the present ratio of doctors to the inhabitants we must add a few more to the list. If therefore we allow one additional doctor to each one hundred of those recorded in the Transactions, that will give us eighteen more in the State. This makes a total of seventy-eight new doctors required each year in Alabama to maintain the present ratio of physicians to population. This includes thirty to replace those who die, thirty to do the work of those who abandon practice, and eighteen to fill new stations called for by increase in population. Turning now to the reports of State and county examining boards we find that during the same year eighty-four licenses to practice were issued, which is a surplus of only six over the number estimated. There are, it is true, elements in the above calculation which tend to weaken its conclusions. On the other hand there are circumstances that could be adduced to strengthen it. But the estimate is not intended to be taken as accurate. Its object is to show that the overproduction of doctors is not as great as it is generally supposed to be; and to this extent the calculation is reliable and useful.

Another object of the association, as stated in the constitution, is "to organize the medical profession in the most thorough manner possible". That such an organization is desirable no sensible man can doubt. We live in an age of combinations. We are surrounded on every hand by unions, trusts, federations, associations and leagues, and their general purpose is to protect their members in the pursuit of their business, and, incidentally, to get the advantage of everybody else. There is no trade or profession that is not in some way united in bonds of mutual support or protection. Were

the doctors to stand alone, without organization, they would be as helpless as were the old time unarmed plebeians in a crowd of steel clad robbers. In spite of this truth our profession has been more slow to perfect its organization and render it more effectual than almost any other.

This is illustrated by the fact that in our own State at least one-third of our doctors still remain outside of the association. As the most necessary element of organization is membership, your President, upon assuming the obligations imposed upon him by the office, sought for some means to induce the non-affiliates in our State to join their county societies. To this end he sent a personal letter to every doctor in Alabama who was legally entitled to practice, but who was not a member of his local organization, setting forth the desirability of union, and urging him to consider the matter. The only exceptions were in Jefferson, Mobile, and Montgomery counties, where other means were tried.

Quite a number of replies were received, some of which throw a curious light upon the motives that sometimes control the actions of men. Some did not know that their names were not upon the roll of membership. Some lived so far from the place of meeting that they could not afford attendance, and did not realize that their membership would be valuable by increasing our strength even if they could not attend more than once a year. One reported that he had ridden several times a long distance to the meeting, had heard nothing but the calling of the roll, the reading of the minutes, and a motion to adjourn; and he had evidently never reflected that he could have added to the interest of such meetings by carrying to them a short paper, or reporting some interesting case for discussion. Some had

lost interest in medicine and were trying to retire from practice. Several remained out because some who were in did not conduct their practice in an ethical manner.

Two doctors complained of each other, and in each instance the complaint was exactly the same. A few had lost both faith and interest in medicine; and one gentleman suggested to your President the desirability of ceasing the sinful use of drugs, and embracing christian science. By far the larger number of those addressed made no response. The next step taken was the writing of official letters to the Presidents of county societies, asking their co-operation in this effort to increase the membership. Very few replied to these letters. Several who wrote stated, in effect, that all the desirable material in their counties was already within the fold. Some showed that topographical difficulties explained the weakness of their societies. Most of the answers promised active aid; and some of them reported encouraging results already accomplished. One President reported that he had acted upon the suggestion to try to increase the membership of his society, with results as follows: "We had only six members, and at our last meeting we took in eight more, the result of a few letters urging the doctors to come out and take part with us. We have now in our county only six legal doctors who are not members, and I feel sure, by our next meeting, of getting five of the six to join us."

The foregoing quotation shows what can be accomplished by earnest effort. Finally, realizing the value of repeated urging, your Vice Presidents were requested to communicate with the Presidents of county societies within their respective jurisdictions, and to stimulate them to continue their efforts. Your Senior Vice President reported promptly that he had done so, with grati-

fying results. He submitted copies of two circulars which he had mailed appropriately throughout his territory, one addressed to the Presidents of county societies, and the other to non-affiliates. They are so excellent and logical that your President regrets that the necessary length of his message precludes their reproduction therein. The Junior Vice President also issued a circular letter, and though at the date of this writing he has made no report of results, it is hoped they will be entirely satisfactory.

In addition to the measures thus described your President made visits to several of the county societies, meeting everywhere with a pleasant welcome and an attentive hearing. In most of these visits he was accompanied by your Senior Censor, whose able assistance added greatly to their usefulness and efficiency.

Many more such visits had been planned than were actually made, but the yellow fever alarm and consequent quarantine restrictions interfered with these intentions during the summer, and afterwards other hindrances presented themselves. These consultations with the societies proved very interesting and instructive, to the visitors at least, and seemed to strengthen the feeling of loyalty to the association so desirable to maintain. It also afforded an opportunity for quiet personal discussion of the objects and principles of our organization, points which are not generally understood as they should be. This lack of appreciation is not confined to those doctors who, never having belonged to the association, might be excused for not having studied its organic law. Many good and faithful members seem to have failed to grasp its scope and import. Some seem to think its principal usefulness lies in the opportunity it affords for the reading and discussion of medical papers. Some look upon it as a machine to be used for

personal advertisement. Some look upon it as a sort of trades-union affair, useful only in such degree as it puts more dollars in their pockets. Some, however, realize that the chief aim and objects of the association are, to improve the hygienic and sanitary conditions of the State; to protect its people against the impositions of quacks and pretenders; to elevate the standards of medical education; to secure for publication the vital statistics of the State; to see that proper sanitary conditions are maintained in our schools, prisons, and poor-houses; to guard against the invasions of epidemic diseases; and to prevent the management and control of all these undeniably medical matters from falling into the hands of the politicians to serve as bribes for votes or motives for partisanship. There is no element of the trades-union in all this. On the contrary, such an organization of medical men for the prevention of disease presents the rare spectacle of an effort to accomplish objects that must inevitably diminish the revenues and decrease the business of those making the effort, yet with their full consciousness of that fact. There is nothing ignoble or selfish about such work as that, and the reason its dignity is not more generally recognized by the public is because we ourselves so often fail to realize fully its import. The high character of our aims is illustrated by the legislation recommended to the General Assembly at its last session by your Senior Censor. In not one single instance were its objects suggested or dictated by the financial interests of any doctor, or those of the profession at large. No one tried to aggrandize himself or his friends. Wherever anything was proposed that would cost money it was *pro bono publico*, and the expenditures were to cover expenses which would be incurred only with the sanction of the Governor. Several of the proposed measures

were defeated, apparently by parliamentary trickery inspired by ignorance or fanaticism; but the real blame lies at our own doors. We have an organization reaching to the most remote and secluded corner of the State. No town, village, hamlet, or rural neighborhood is beyond the reach of our influence. The humblest of us can have, through our organization, a voice that can make itself effectually heard in the halls of both State and National legislatures. This voice, not, of course, as that of an individual, but as an integral part of the expressed opinion and will of the organized profession of the State, would be too potent in its influence over the future weal or woe of aspiring politicians to be contemptuously disregarded. It is only necessary for us to be agreed among ourselves as to the hygienic and sanitary necessities of the State, and to demonstrate that agreement to the General Assembly by our widespread and earnest expressions, to secure whatsoever legislation we recommend.

We, as a united profession, would be justified in exerting an active opposition to any man or combination of men who would refuse to entertain our propositions under such circumstances, or to allow them the weight and influence to which they would be entitled.

It was because we failed to make ourselves heard as a united profession that the General Assembly refused to provide our people with the only safeguard against small-pox, a law of compulsory vaccination. In vain did your Senior Censor write letters to the various county societies, appealing to them to support his efforts. A few passed resolutions and sent them to their members, and that was the end of it. A few doctors wrote a letter or two. Meanwhile all the forces of fanaticism were mustered against the measures. Men of one idea, full to the brim with fallacious and easily refuted

arguments, haunted the lobbies, buttonholed the members, and flooded the desks with erroneous statistics and unwarrantable conclusions. If our profession had shown one-tenth of their zeal our cause would have triumphed. But instead of the voice of the educated medical profession being listened to with respect, it was disregarded, and the opinion of men utterly ignorant of true pathology or the simplest principles of preventive medicine prevailed.

Your President cannot avoid the conclusion that a suicidal selfishness lies at the root of our inactivity. There ought not to have been a day during the last session of our legislature when no doctor was there to do his share in the noble and unselfish work so strenuously undertaken by your Senior Censor. True no immediate reward in money was in sight, but immediate rewards are generally insignificant, while those that come to men after long waiting and hard and persistent effort are the greatest that ordinary mortals achieve. Did you never notice that the poorest men on earth are those who receive their pay at the end of every hour? That next in the scale of poverty are those paid off at the close of each day? The successful man or organization is the one that works steadily and persistently for a given object, seeking no immediate reward, but content to labor and to wait for the final crown of success. Were all of us animated by such a spirit we would hear no more cavilings about honors, and offices, and close corporations, but every man would perform to the best of his ability the duty of each successive hour, always remembering that he owed a duty to his profession, his country, his God, and to humanity, as well as to himself; confident that whatever reward he might earn would come to him at the proper time. It is this broad spirit of unselfish devotion that the Medical Association of the

State of Alabama needs revived and shed abroad among its members, and not the revolutionary changes in its laws and ordinances advocated by some of its members. Another object specified in the constitution is "to secure careful and reliable accounts of all the endemic and epidemic diseases of the State." In fulfillment of this important object your President has endeavored to secure from different parts of the State such regular reports and volunteer papers as would present a comprehensive view of the conditions relating to such diseases recently prevailing in Alabama. An examination of the programme for the present meeting will show the results of this effort.

Heretofore small-pox and yellow fever have been the diseases that were most frequently considered under this head, and such is the case in the present series of papers. Since the organization of the work for this session, however, it has come to the knowledge of your President that small epidemics of cerebro-spinal meningitis have prevailed for brief periods in various localities in the State. During the past year many of the medical journals have chronicled its appearance in different places in the United States and its virulence and fatality together with the painful and distressing character of its phenomena and the undetermined nature of its infection have combined to render it one of the most dreaded of all epidemics. Thus far the localities invaded have been circumscribed, the duration of the disease has been brief, and the physicians of the invaded counties in Alabama have been able to stamp it out without assistance. But its increasing frequency throughout the country is a fact that threatens future trouble, and every doctor should be on the lookout for its appearance in his own neighborhood so that he may check its spread by immediate isolation of the patients, and depopulation of affected houses.

Small-pox continues to scourge various parts of the State, and may be expected to do so as long as some counties refuse to take the necessary steps to stamp it out. If they were the only sufferers from their own indifference it would not be so bad, but such counties constitute constant foci of infection from which other counties are reinfected time and time again, no matter how successfully they may have eradicated the disease for the time being. Fortunately the disease has thus far been of a very mild character, the mortality therefrom being unprecedentedly low, and but few cases of serious disfigurement have been noted. There is, however, no guarantee that these unusual conditions will continue, and we know that as long as the contagion shall be so widely disseminated we are on the brink of public disaster.

Your President takes this opportunity to congratulate the association and the State upon the wisdom and success of the splendid work done last summer by your health officer in protecting Alabama from an invasion of yellow fever.

The promptness, decision, thoroughness and courage he displayed, the military regularity of his line of pickets extending along the whole northern and western boundaries of the State, and the persistence that refused to be daunted by the entire lack of available funds to pay expenses, cannot be too highly appreciated. The result demonstrated the efficiency of scientific quarantine in capable hands. It would be ungrateful for this meeting to adjourn without acknowledging its appreciation of such thorough and successful work. The foregoing matters will be considered in detail by your board of censors. It is appropriate here to suggest their consideration only in a general way.

It has been customary for presidential messages to contain suggestions for such legislation, by ordinance or otherwise, as seemed to be needed. After an impartial survey of the whole situation the conclusion reached is that at present but little change is desirable. What we need is the more effectual utilization of the means at our disposal, and not the creation of new conditions of law. How many of us know what are the laws and ordinances already in effect? How many of us are familiar with The Book of the Rules, and its supplement, without which we are ignorant of the entire matter? How many of us have ever read the Transactions of last year? During his visits to county societies this year your President made a point of asking doctors if they had read the current volume of Transactions. It was astonishing to find how few had done so. Gentlemen who were supposed to know all about the work asked questions that were fully answered in that volume. When told that they must have failed to read it they frankly confessed that such was the case. They had "not had time." In the light of these facts your President recommends: First, that you read your Transactions. Second, that each member supply himself with a Book of the Rules, and study it. It will give him more respect for the association, and for himself as a member thereof. Third, that he religiously and promptly force himself to answer every official letter sent to him by any officer of the Association. Such letters are not written for the personal advantage of the writers. They are not advertisements, or petitions for subscriptions. They are the evidence that an official whom you have elected to attend to your public business calls your attention to a part of the duty that honorably devolves upon you, and you cannot, honorably, ignore such a letter. The suggestion is also advanced that the board of censors take into considera-

tion the advisability of providing a fund from which to pay the necessary expenses of the President or Vice-Presidents of the association in visiting county societies which especially need attention, such Societies to be designated by the said board of censors. Also it seems desirable to your President that the publishing committee shall be a permanent committee, composed of the retiring President, the Senior Censor, and the Secretary. They, more than any one else are interested in the prompt and accurate publication of the Transactions, and their supervision of the work is an entirely logical proposition.

The foregoing are recommendations of a positive nature. There is one of negative character which is worthy of your attention. There has seemed to be sometimes a tendency to introduce the methods of so called politics into the affairs of this organization. The mutual interchange of influence for the present or future benefit of those supposed to be able to exercise it: the agreements that for present aid future support will be accorded: the suggestion of future nominations conditioned upon present success– all these have been dimly but suggestively indicated by some of the features of past meetings. No greater danger than this could threaten the association. The honors are only honors. There is no emolument connected with them. If the element of honor be eliminated, what remains? Absolutely nothing. Where will be the honor in any position within the gift of the association if it shall be believed that the rewards are not bestowed on account of merit, but because of previous bargains?

This appeal is not addressed to any who are willing to thus debase the honors of the Association. To them it would be useless, for "they know not what they do." It is a notice to the mass of unselfish, earnest doctors, who constitute the voting strength of our organization, to guard well the honor of the association lest it be

prostituted to private ends. They can, if they will, forever defeat all such unholy alliances. The power for good that resides in the Medical Association of the State of Alabama is beyond dispute. So long as its members are actuated only by a desire to promote the public weal, and can demonstrate to their fellow citizens that such is the case, they will have the support of every respectable element in their respective communities. The public may be slow to recognize the truth, but sooner or later it will be known. In the end he who sits selfishly at home, never exerting himself unless he can see a dollar to pay for it, will find himself a loser in the race for popularity and profit. Merit will win. The exceptions to this rule are few, and generally to be explained by the unexpected or hidden demerits which insidiously nullify other and more worthy qualities. A broad-minded physician, who never permits his duty to be measured by dollars, will sooner or later be recognized by the public as a safer guardian of health and sanitation than the mercenary character whose first thought is always "what will it pay?" The future of the association is pregnant with possibilities. There is no similar medical organization in existence. To it is committed the duty of administering the sanitary laws of the State. While most other medical societies are mere professional debating clubs, ours is an arm of the State government. It, and it alone, preserves the management of the health interests of the commonwealth from falling into the hands of the politicians. It alone is charged with the duty of protecting our homes and firesides from the pestilence that walketh at noonday.

Its structure is the most perfect that has ever been devised for the purpose, and though it may need a little change here and there to meet the vicissitudes of time, no revolutionary measures should ever be tolerated by

any man who lóves it. When we shall have more fully demonstrated our usefulness, when throughout the State the members of county societios shall bestir themselves, individually and collectively, to make felt their influence whenever health matters are in question, then the means to carry out our patriotic designs will be readily appropriated by our General Assembly, and we shall stand in our legislative halls as counsellors, and not as beggars. The day will come when all this will be accomplished, and its advent depends only upon our united efforts.

Finally a word as to the social features of the association.

Our badge is a sufficient introduction of one member to another. To a great extent it is also an introduction to any in this city whom you may wish to know, for it is a mark of honor, and a distinction, to wear it. It is therefore entirely out of order to wait for any other introduction to each other. Every man who wears it is our brother, and surely we may speak to him anywhere, and share with him our pleasures, or freely partake of those he has to divide with us. No matter how solemn or dignified any of us may look we are all doctors, and megalocephalus is unknown among us. Let us therefore freely mingle without reserve, confident in the universal good will that prevails. What if we cannot remember each other's names? We will learn them after awhile, when we have asked them often enough; and meanwhile we will be getting acquainted. The more we know each other the better will be our mutual liking. Most of us work too hard, and take life too seriously. Let us make this occasion serve as one of relaxation, remembering the lesson of the unbent bow which renews its strength and elasticity by seasonable rest. Your President ardently hopes that this occasion may be one of unalloyed benefit and pleasure to every one of its participants.

THE ANNUAL REPORT OF THE SENIOR VICE-PRESIDENT.

By Samuel Gilbert Gay, M. D., Selma.

Senior Counsellor of the Medical Association of the State of Alabama.

Mr. President and Gentlemen of the Medical Association of the State of Alabama.

After returning to my home from the Birmingham session of last year, I fully realized the honor and the responsibility conferred upon me by this association in electing me to fill the unexpired term of my distinguished friend, Dr. E. L. Marechal, the second highest honor in the gift of this association.

In order to show my appreciation of this honor I at once set to work. I first prepared two letters, one addressed to the non-affiliates, in my district, which I mailed to the address of every regular physician whose name appeared in the Transactions, who had been engaged in the practice of his profession for twenty-five (25) years or less, requesting and urging him to become an active member of his county medical society. A letter received from our distinguished President at a later date informed me that he was working along the same line. Our object was one in common, namely, to increase the membership of each county medical society, and thus strengthen this association. Later I again mailed circular letters to the above named physicians, calling their attention to my first letter, and again urging them to become members of their county medi-

cal societies. To these letters, I am glad to say, I received a good many replies, signifying the intention of writers to comply with my request. How well our efforts were rewarded, you are able to judge, when I report that, in twenty-one counties of the thirty-three comprising my district, there was from one to nine new members who joined their county societies. Total number fifty-six. The second letter was addressed to some of the officers and members of each county medical society, urging upon them the necessity of instilling renewed interest in the work of their societies, and to these letters I regret to say I received few replies.

In a large number of the counties the collecting of vital and mortuary statistics has been attended to, in the main, very well when we consider the adverse circumstances that some of the health officers have labored under.

In some of the counties the board of commissioners have failed to recognize the importance of the health officer, hence no salary was provided. I wish to call the attention of these counties to the action of the board of health in Elmore county, where the salary of the health officer was inadequate, and the commissioners refused to increase it. A bill was passed by the last legislature compelling them to pay a salary of $200.00 per year to the health officer. I find, after careful inquiry, that smallpox has existed or still exists in thirty-one out of thirty-three counties in the southern district of this State. Yet the last legislature failed to see the importance of giving us compulsory vaccination, the only means in our power by which we can control this dreaded disease. Some of its members stooping to political trickery, to defeat this bill, the passage of which, means so much for the life, health and wealth of our people. I wish to say that I have had correspond-

ence with every county in my district, and received some form of report from each. For which I here wish to express my thanks and appreciation.

Before beginning my report in detail, I desire, with all of the emphasis possible, to endorse the recommendations made by the two Vice Presidents preceding me, that the Vice Presidents be increased to a sufficient number, so that they may be able to visit each county medical society at least once a year.

I wish further to suggest, as few of us are blessed with an abundance of worldly goods, that this association should allow to each vice president a sum sufficient to pay his actual traveling expenses when visiting the different societies in his official capacity.

AUTAUGA COUNTY MEDICAL SOCIETY.—Meets from three to six times a year. Holds special meetings when occasion arises, has a membership of eight, one joining during the past year. Has an average attendance of four to six at each meeting. Papers are read and discussed, and some interest is taken in scientific work. Three regular physicians in the county are not members of the society. There are no illegal physicians in the county. Two examinations for the study of medicine during the past year. No examinations to practice medicine.

There are two students attending College from this county. Dr. M. D. Smith is county health officer, his salary is $100.00 per year. He succeeds fairly well in collecting vital and mortuary statistics. The board of censors are active in attending to their duties. My informant thinks his society has improved since last year.

BALDWIN COUNTY MEDICAL SOCIETY.—Meets regularly four times a year, and oftener if occasions demand. Has a membership of seven, with an average attendance of 75 per cent., papers are read and discussed and members take interest in scientific work. One regular phy-

sician in the county, who is not a member of the Society, but his application is now on file, and would be acted upon at their next meeting. There is a suspicion of one illegal physician being in the county. His case is now being investigated, in order to indict him before the grand jury. Have made no examinations for the study of medicine for the past year. One student attending Medical College. One examination for the practice of medicine now in progress. Dr. W. M. Lovelady is county health officer, at a salary of $300 per year. Considering the vast amount of territory covered by the society from which vital statistics are to be collected. his success would be considered good. Board of censors have been active in attending to their duties. This society should be an example to the Societies in more densely populated counties, as I am reliably informed that some of its members travel a distance of sixty-five miles in order to attend its meetings.

Barbour County Medical Society.—This society meets once every two months. Has a membership of twenty-one. Has an average attendance of eight or ten. Papers are read and discussed and members are interested in scientific work. Six new members have joined during the past year. Eight regular physicians are not members of the society. No illegal physicians. No examinations for the study of medicine. Two examinations for the practice of medicine. One successful, one rejected. Dr. C. L. Guice is county health officer, salary of $150.00 per year. His success in collecting vital and mortuary statistics has not been as good as we could hope for. Board of censors have been active in attending to their duties. This society has improved in membership during the past year. In fact it has been the most prosperous year in the history of the society.

BULLOCK COUNTY MEDICAL SOCIETY.—This society meets regularly the first Wednesday in each month. Rarely ever fails to hold a meeting. The interest is not only good but the society is increasing in strength and enthusiasm. The membership is twenty. An average attendance of ten or twelve. Papers are read and discussed regularly and great interest is taken in scientific work. Have an essayist and alternate appointed for each meeting, subjects are announced in the middle of the month. Volunteer papers are often called for, read and discussed. All regular physicians in the county are members of the society, five having joined in the past year. No illegal physicians in the county, all such are promptly notified of the violation of law, which will be upheld in this county at any cost. No examinations for the study of medicine. Three examinations to practice medicine, all successful. Three students attending medical college. Dr. Seal Harris is county health officer, at a salary of $150.00 per annum, usually receives extra compensation during epidemics and for extra hard services. He makes a regular abstract report each month to his society. The collection of vital and mortuary statistics in the county is almost perfect. He has sufficient assistance in the beats, and secures the co-operation of landlords, school teachers, undertakers, sextons, midwives and others. The board of censors have been active in attending to their duties, having the co-operation of county and city authorities, the people and the profession.

BUTLER COUNTY MEDICAL SOCIETY.—This society holds its meetings monthly. Has a membership of seventeen, average attendance five. Papers are read and discussed, but not as much as is to be desired. One regular physician, not a member of the county society. No illegal physicians. No examina-

tions for the study of medicine. One student attending medical college. Two examinations for the practice of medicine. Dr. J. C. Kendrick is county health officer, salary $100.00 per annum. Moderate success in collecting vital and mortuary statistics. Board of censors have attended to their duties. The meetings for the past six months have not been held regularly on account of the almost impassable condition of the roads, due to excessive rains.

CHILTON COUNTY MEDICAL SOCIETY.—This society meets once a year, with an average attendance of six. No papers are read. Has a membership of eight. No new members. Three regular physicians not members of the society. No illegal physicians. No examinations for the study of medicine. None attending medical colleges. No examinations to practice medicine. Board of commissioners failed to provide a salary for a county health officer. Therefore, there is nothing done in the way of collecting statistics. Board of censors have been active in attending to their duties, but without result. There is some effort being made to revive interest in the society.

CHOCTAW COUNTY MEDICAL SOCIETY.—This society holds two meetings yearly. Has a membership of ten with an average attendance of six. Very little interest is taken in reading of papers and scientific work. Two regular physicians not members of the society. Three have joined in the past year. One illegal physician in the county. No steps have been taken to prosecute him. No examinations for the study of medicine. No students attending medical college. Two examinations to practice medicine. Dr. J. L. Granberry is county health officer, salary $50.00 per year. Has done very little in the way of collecting vital and mor-

tuary statistics. Board of censors have attended to their duties.

CLARK COUNTY MEDICAL SOCIETY.—This society meets quarterly, with a membership of nineteen. Average attendance ten. Papers are read and discussed, but not as regularly as should be expected. One member joined during past year. There are seven regular physicians who are not members of the society. Two illegal physicians and steps are now being taken to prosecute them. One examination for the study of medicine. One student attending medical college. One examination to practice medicine. Dr. G. S. Chapman is county health officer, with a salary of $150.00 per year. Makes an earnest effort to collect vital and mortuary statistics, but meets with poor success. Board of censors could be more active in attending to their duties. The President has been active in trying to reorganize this society, but meets with little encouragement.

COFFEE COUNTY MEDICAL SOCIETY.—This society meets quarterly, with a membership of thirteen with an average attendance of 75%. No papers are read. An addition of nine members to the society during past year. Five regular physicians not members. No illegal physicians. No examinations for the study of medicine. Two students attending medical colleges. One examination for the practice of medicine. Dr. H. F. Harp is county health officer. He receives no salary and nothing is done to collect vital and mortuary statistics. Board of censors have been active in attending to their duties. The condition of the society has improved in the past year, and an earnest effort is being made for a higher standard.

CONECUH COUNTY MEDICAL SOCIETY.—This society meets quarterly, with a membership of seventeen, with an average attendance of twelve to fourteen. Papers are

read. One regular physician not a member of the society, and one application for membership. No illegal physicians. Two examinations for the study of medicine. Two students attending medical colleges. Two examinations to practice medicine. Dr. A. Jay is county health officer, with a salary of $200.00 per year. The collection of vital and mortuary statistics has been successful. The board of censors have not been attentive to their duties. There is an organization known as Pine Belt Medical Association, which was organized in January, consisting of Butler, Covington, Conecuh, Escambia and Monroe counties. Its object is to create greater interest in medical work.

COVINGTON COUNTY MEDICAL SOCIETY.—This society endeavors to meet quarterly. Has a membership of six, with an average of fifty per cent at each meeting. No papers are read. There is some interest taken in scientific work. One addition to society in past year. All regular physicians in this county are members of their society. No illegal physicians in the county. Two examinations for the study of medicine. Two students now attending medical colleges. No examinations for the practice of medicine. Dr. Bean is health officer for this county, with a salary of $75.00 per year. My informant does not know his success in collecting vital and mortuary statistics. The board of censors have been inactive.

CRENSHAW COUNTY MEDICAL SOCIETY.—This society meets monthly. Has a membership of eighteen with an average attendance of six. No papers are read and there is little interest taken in scientific work. No new members in past year. Three regular physicians are not members of their society. One illegal physician. This society has endeavored to prosecute him before the grand jury, but failed to secure a bill, even after some

of its members became personally responsible for the costs of the prosecution. No examinations for the study of medicine. Two students now attending medical colleges. Two examinations for the practice of medicine. Dr. G. S. Tankersley is county health officer, his salary is $125.00 per year. He does his duty in trying to collect vital and mortuary statistics, but meets with poor success owing to the indifference of the physicians. The board of censors have not attended to their duties as promptly as should be expected. My informant states that his society is in a better condition than it was a few years ago, that an earnest effort is now being made to elevate its standing.

DALE COUNTY MEDICAL SOCIETY.—This society meets monthly, has a membership of fourteen with an average attendance of six. Papers are read and discussed and there is interest taken in scientific work. Two additions to the society in the past year. Seven regular and two eclectic physicians are not members of this society. One illegal physician. He was prosecuted and convicted a year ago, but has recently attempted to practice again. No examinations for the study of medicine. Two students now attending medical colleges. One examination for the practice of medicine. There is no salary provided for health officer. No attention is paid to collecting vital and mortuary statistics. I cannot say that the board of censors have been active in attending to their duties, if so, there would have been some provision made for a county health officer. This society has made no improvement during past year.

DALLAS COUNTY MEDICAL SOCIETY.—This society meets monthly, has a membership of twenty-six with an average attendance of eight to ten. Papers are read and discussed, interesting cases reported, and much interest in scientific work. Two additions to the society

during the past year. Seventeen regular physicians are not members of the society. A large number of these are aged gentlemen, and not now engaged in the practice of their profession. This society has made strong efforts to interest non-members in its work, but has met with but little success. No illegal physicians. No examinations for the study of medicine. Seven or eight students are now attending medical colleges. One examination to practice medicine. I have the honor to fill the position of health officer. The salary is $240.00 per year. Having been recently elected to this office, at a time when small-pox was prevailing in different sections of the county, the care of which demanded a great deal of my time and attention, my success in collecting vital and mortuary statistics has not been as good as I wished. I have now almost fully organized a corps of assistants throughout the county and expect more success in statistical work in future. The board of censors have been active in attending to their duties. I cannot say that this society has improved in the past year.

ELMORE COUNTY MEDICAL SOCIETY.—This society meets quarterly and oftener for special purposes. Has a membership of twenty with an average attendance of ten. Papers are read and discussed and much interest is taken in scientific work. Two additions to society in the past year. Five regular physicians in the county who are not members of this society. Two illegal physicians. Efforts to prosecute them have been fruitless so far, but their cases will be taken to the higher courts of the county, where they expect success. One examination for the study of medicine. Three students now attending medical colleges. One examination to practice medicine. Dr. W. A. Warren is health officer, the salary heretofore has never exceeded $100.00 and sometimes less. The last legislature passed a bill, compell-

ing the county commissioners to pay $200.00 per annum. He has just commenced the work of collecting vital and mortuary statistics and will soon have the work in good shape. The board of censors have been active in attending to their duties.

ESCAMBIA COUNTY MEDICAL SOCIETY.—This society meets quarterly, has a membership of nine with an average attendance of sixty per cent. No papers are read and little interest is taken in scientific work. No additions to the membership during past year. One regular physician not a member of the society. Three illegal physicians, no steps have been taken to prosecute them. No examinations for the study of medicine. Two students now attending medical colleges. No examinations for the practice of medicine. Dr. E. T. Parker is county health officer, with a salary of $150.00 per annum. His success in the collection of vital and mortuary statistics is moderately good. Board of censors have been attentive to their duties. No improvement in this society during past year.

GENEVA COUNTY MEDICAL SOCIETY.—This society holds quarterly meetings with a membership of thirteen and an average attendance of two thirds of its membership. No papers are read. No interest is taken in scientific work. Two additions to the society in the past year. Three regular physicians are not members of the society. Four or five illegal physicians. All have been reported to the grand jury, but that body failed to find bills against them. My informant states that he reports this number of illegals, as they have been reported as such heretofore, but states that two or three of them are young men who have attended one or two courses of lectures in reputable colleges, and who are now following the study of medicine in a legitimate way and have done some practice under the name and super-

vision of their preceptors. No examinations for the study of medicine. Three students are now attending medical colleges. Two examinations to practice medicine. Dr. R. L. Justice is county health officer, salary $50.00 per annum. His success in the collection of vital and mortuary statistics is moderate. Board of censors are attentive to their duties.

GREENE COUNTY MEDICAL SOCIETY.—This society has held no meetings for the past three years. Therefore there is nothing to report from this county. The only redeeming feature is, that the board of censors continue to do what work comes before them.

HALE COUNTY MEDICAL SOCIETY.—This society meets quarterly, has a membership of thirteen, with an average attendance of sixty per cent. Papers are read and discussed and some interest is taken in scientific work. There have been three additions to the membership during past year. Three regular physicians who are not members of the society. No illegal physicians. No examinations for the study of medicine. Four students attending medical colleges. No examinations for the practice of medicine. Dr. J. Huggins is county health officer, salary $150.00 per year. Has poor success in collecting vital and mortuary statistics. He reports that only six physicians send in their reports. Board of censors attend to their duties. The secretary writes that he is hopeful for a change for the better in the near future.

HENRY COUNTY MEDICAL SOCIETY.—This society meets quarterly, has a membership of nineteen. An average attendance of sixty per cent. Papers are rarely read and very little interest is taken in scientific work. Two members joined during past year. Twelve regular physicians are not members of the society. Five illegal physicians. Steps are now being taken to indict them

before the grand jury. No examinations for the study of medicine. One student now attending medical college. No examinations to practice medicine. Dr. W. M. Ryals is health officer, salary $100.00 per annum. His success in collecting vital and mortuary statistics is not satisfactory. The society has not improved during the year. The board of censors have been attentive to their duties.

LEE COUNTY MEDICAL SOCIETY.—This society meets when called; has had no regular meetings for some time. Has a membership of twelve, an average attendance of ninety per cent. No new members in past year. No illegal physicians. No examinations for the study of medicine. One student attending medical college. No examinations for the practice of medicine. Has no regular health officer, and no salary provided for same. Nothing is done toward collecting vital statistics. The secretary writes that they have had a recent meeting and reorganized the society, and hopes for an early improvement in its condition.

LOWNDES COUNTY MEDICAL SOCIETY.—This society holds two yearly meetings. Has a membership of fifteen an average attendance of seventy-five per cent. No papers are read and little interest is taken in scientific work. Four members have joined during past year. Eleven regular physicians in the county are not members of the society. No illegal physicians. Two examinations for the study of medicine. Four students now attending medical colleges. Four examinations to practice medicine. Dr. C. W. Powell is health officer, salary $25.00 per year. Little success in collecting vital statistics. Board of censors have been attentive to their duties. There has been no improvement during past year.

MACON COUNTY MEDICAL SOCIETY.—This society meets quarterly, and at called meetings. Has a membership of ten with prospect of two joining at next meeting. Average attendance fifty per cent. Papers are sometimes read and discussed and there is some interest in scientific work. No new members during past year. Eleven regular physicians are not members of the Society. No illegal physicians. No examinations for the study of medicine. One student attending medical college. No examinations for the practice of medicine. Dr. M. M. Smith is county health officer, no salary provided. Very poor success in collecting statistics. Board of censors have been attentive to their duties.

MARENGO COUNTY MEDICAL SOCIETY.—This society held but one meeting during the past year. Has a membership of nineteen with an average attendance of nine. No papers are read and little interest is taken in scientific work. Two joined the society during past year. Seventeen regular physicians not members of the society. One illegal physician. No steps have been taken to prosecute him. No examinations for the study of medicine. One student now attending medical college. Two examinations for the practice of medicine. Dr. W. L. Kimbrough is county health officer, salary $150.00 per year. Meets with little success in collecting vital and mortuary statistics. Board of censors have attended to their duties, but with lack of interest.

MOBILE COUNTY MEDICAL SOCIETY.—This society holds weekly meetings. Has a membership of thirty-nine Has an average attendance of ten at each meeting. Papers are read and discussed and much interest is taken in scientific work. No addition to the membership in past year. Thirty-four regular physicians in the county who are not members of the society. No illegal

physicians. Unable to ascertain the number of examinations for the study of medicine and the number of students attending medical colleges. One examination for the practice of medicine. Dr. P. J. M. Acker is county health officer, salary $600.00 per year. Admirable success in collecting vital and mortuary statistics. Board of censors have been active in attending to their duties.

MONROE COUNTY MEDICAL SOCIETY.—This society holds two yearly meetings. Has a membership of fifteen with an average attendance of fifty per cent. Papers are read and discussed and some interest shown in scientific work. No additions to its membership during past year. One regular physician in the county not a member of the society. No illegal physicians. No examinations for the study of medicine. Three students now attending medical colleges. No examinations for the practice of medicine. Dr. J. M. Wiggins is county health officer, salary $100.00 per year. Physicians are negligent in making their reports, some not reporting at all. Therefore the collection of vital statistics is not what it should be. The board of censors have attended to their duties.

MONTGOMERY COUNTY MEDICAL SOCIETY.—This society holds weekly meetings. Has a membership of fifty-one, an average attendance of fifteen. Papers are read and discussed regularly, and interest is taken in scientific work. But the majority of members take little or no interest in the society. Five additions to the membership during past year. Twenty-seven regular physicians are not members of the society. No illegal physicians in the county. No examinations for the study of medicine. Five or six students are attending medical colleges. Two examinations for the prac-

tice of medicine. Dr. Shirley Bragg is county health officer, salary $600.00 per year. Is quite successful in the collection of vital statistics. Board of censors have been active in attending to their duties.

PERRY COUNTY MEDICAL SOCIETY.—This society holds two yearly meetings, with a membership of nine and and an average attendance of four. No papers are read and there is little interest taken in scientific work. No new members during past year. Six regular physicians in the county are not members of the society, and but few of these are engaged in the practice of their profession. No illegal physicians. Two examinations for the study of medicine. Two attending medical colleges. One examination to practice medicine. This county has no health officer, the commissioners failed to provide a salary. Therefore no work is done toward collecting vital statistics. Board of censors are attentive to their duties.

PIKE COUNTY MEDICAL SOCIETY.—This society meets monthly, with a membership of twenty average attendance of forty per cent. Papers are read and discussed and some of the members are interested in scientific work. One addition to the society in the past year. There are fourteen regular physicians in the county who are not members. No illegals. One examination for the study of medicine. Two students attending medical colleges. Two examinations to practice medicine. Dr. C. W. Hilliard, Sr., is health officer. There is no salary. He succeeds moderately well in collecting vital statistics. Board of censors are attentive to their duties.

RUSSELL COUNTY MEDICAL SOCIETY.—This society meets quarterly, with a membership of twelve, and an average attendance of fifty per cent. Papers are read

and discussed and interest taken in scientific work. Three additions to the membership in past year. There are six regular physicians who are not members of the society. One illegal physician. He has been prosecuted and fined. No examinations for the study of medicine. One student attending medical college Four examinations to practice medicine. Dr. N. B. Prather is county health officer. He receives no salary and nothing is done toward collecting statistics. Board of censors have attended to their duties.

SUMTER COUNTY MEDICAL SOCIETY.—This society meets quarterly, has a membership of fifteen, with an average attendance of fifty per cent. Papers are some times read and discussed. As a whole, little interest is taken in scientific work. Two new members in past year. Seven physicians in the county are not members of the society. No illegal physicians. No examinations for the study of medicine. Two students attending medical colleges. One examination to practice medicine. Dr. D. S. Brockway is county health officer, salary $100.00 per annum. Meets with moderate success in collecting vital statistics. He finds difficulty in inducing the physicians to report. Board of censors have attended to their duties.

WASHINGTON COUNTY MEDICAL SOCIETY.—This society meets once a year. Has a membership of five. An average attendance of seventy-five per cent. of members. No papers are read. No interest is taken in scientific work. No physician in the county who is not a member of the society. Dr. W. E. Kimbrough is county health officer, with a salary of $100.00 per year. There is no effort made to collect vital statistics. Board of Censors have attended to their duties.

WILCOX COUNTY MEDICAL SOCIETY.—This Society holds no regular meetings, has a membership of twenty. An average attendance of five. No new members in past year. Unable to ascertain the number of physicians who are not members of the society. One illegal physician. He has made application, but has not appeared for examination. No examinations for the study of medicine. Five students attending medical colleges. One examination to practice medicine in past year. Dr. R. H. Kilpatrick is county health officer. He receives no salary. Does not attempt to collect vital statistics. Board of censors have attended to some of their duties. I have been promised that efforts would be made to reorganize this society, but have not been informed as to their success.

THE ANNUAL REPORT OF THE JUNIOR VICE-PRESIDENT.

By Samuel Hickman Lowry, M. D., Huntsville.
Senior Counsellor of the Medical Association of the State of Alabama.

Mr. President, and Gentlemen of the Association:

In accordance with the rules of the association, I, as Junior Vice-President, beg leave to submit my Annual Report of the work done by the societies in the counties, comprising the northern division of the State.

The information obtained, and from which this report is made, has been, in nearly every case, through correspondence with the secretaries and officers of the different county societies.

Like most of my predecessors, I found that I did not ask questions enough in my letters, for in the majority of the counties my correspondent would reply by giving me categorical answers, plain "*Yes*" and "*No*," leaving me to guess at anything more I might desire to know; and as a result of this, my report is not as full and satisfactory as I would like.

As a result of my work in the northern division, thirty-one of the thirty-two counties composing it have been heard from.

The only county that I failed to get a report or answer from, was Marion. Don't know whether they are still living down there, or not.

From the above showing, and the following report, I think we may safely say that there is some improvement

in most of the societies, and in some, a very decided advancement.

BIBB COUNTY.—My report from Bibb county shows that it is in fairly good working condition; meetings of the society are held quarterly. Four regular meetings were held during the year 1898, at which papers were read and discussed, and more than the usual interest taken in the work of the society. The average attendance was seven. There are fifteen active members; one more than last year. There are six regular doctors in the county who are not members. No illegal practitioners. There are three young men from this county attending medical lectures. The health officer's salary is $125.00 per year, and my reporter says he has been faithful, and had fairly good success in getting up vital statistics.

BLOUNT COUNTY MEDICAL SOCIETY is not quite just what we would like to have it, but is improving, and doing a little better every year. The membership of the Society is 10. Meetings are held quarterly; four meetings last year, with an average attendance of eight. The health officer receives a salary of $75.00, and his success in getting vital statistics would be very much better if he had the hearty co-operation of all the doctors in his county in sending in their reports. There are fifteen regular physicians in the county, not members of the society. No illegal practitioners. There are two medical students attending lectures from this county.

CALHOUN COUNTY MEDICAL SOCIETY.—The medical society of this county is in good working order. The membership is twenty-three active members, and four honorary members, making a total of twentyseven. Regular quarterly meetings are held. Four meetings were held last year, with an average attendance of ten. There are nine physicians in the county who are not members of the society.

No illegal doctors in the county. The salary of the health officer is $200.00, and he has had very good success in his work. One medical student from this county attending lectures in Mobile.

CHEROKEE COUNTY MEDICAL SOCIETY.—I am very glad to report a very decided improvement in Cherokee county. Since the organization of the new society, in the early part of last year, the work has been progressing very nicely. The society has a membership of fourteen, and meetings are held monthly, and at every meeting papers are read, and cases reported, which brings out a free discussion by the members. The average attendance has been eight. The salary of the health officer is $150.00. He is very efficient in his work. He proceeded against, and got a true bill against one doctor, for not reporting according to law. There are eight regular physicians in the county who are not members of the society. Two illegal doctors in the county. There are two medical students attending lectures; one in Mobile, and one in Nashville, Tenn. The secretary, Dr. H. L. Appleton, winds up his report by saying, "Our society to-day is on a better road to success than it has been for eleven or twelve years. There is a general good feeling among all the members, and each one seems to be doing all he can."

CLAY COUNTY MEDICAL SOCIETY.—I am very glad also to report Clay County Medical Society on the "high road to recovery." The membership of the society is fifteen, holds regular quarterly meetings. Four meetings were held last year, with an average attendance of about seven or eight. The health officer's salary is only $25.00, but notwithstanding the small salary he has done his work very efficiently, and with good success, until the last three months. There are two superannuated physicians in the county who are not members of the society. No illegal doctors in the county. There are three medical students attending lectures from this county.

receives a salary of $160.00, and has done very satisfactory work. The doctors in this county have had to deal with an epidemic of diphtheria and miningetis, and show a fine record. Out of twenty cases of diphtheria, only three deaths, and ten cases of miningetis, three deaths. There are nine regular physicians not members of the society. No illegal doctors in the county.

FAYETTE COUNTY MEDICAL SOCIETY.—The society has a membership of nine; holds quarterly meetings, and considerable interest is manifested by its members. At each meeting papers are read, and cases reported and discussed. Four meetings were held last year, with an average attendance of six. The health officer receives a salary of $50, and has had good success in getting vital statistics. There are three regular practitioners in the county not members of the society. One illegal doctor in the county, I suppose the same one reported last year as having been convicted by the courts. There are two medical students attending lectures from this county.

FRANKLIN COUNTY MEDICAL SOCIETY.—This Society has a membership of seventeen; two more than last year. Holds monthly meetings, but only six or eight meetings held last year, with an average attendance of eight or ten. I have no report of any papers being read, or cases for discussion reported. The health officer receives no salary for his services, and my reporter says, had no success in getting up vital statistics. There is only one regular physician in the county, not a member of the Society. There are two or three illegal doctors in the county. Three medical students from the county.

JACKSON COUNTY MEDICAL SOCIETY.—This society holds regular monthly meetings on the first Tuesday of each month. Seven meetings were held last year, with an average attendance of eight. The membership of

the society is thirteen. At every meeting, papers are read, and cases reported for discussion. The health officer's salary is $150.00 per annum. His work is fairly well done. There are eighteen or twenty doctors in the county, not members of the society. No illegals. Two medical students attending lectures. It was only after repeated attempts, and several letters, that I succeeded in getting any report at all from this county.

JEFFERSON COUNTY MEDICAL SOCIETY.—This society is thoroughly organized, and in a good working condition; has a membership of one hundred and one, holds semi-monthly meetings, with an average attendance of twenty-eight members. Twenty-four meetings were held last year, and at every meeting papers were read and discussed and cases reportep, and altogether a decided interest is shown in the workings of the society. There are sixty regular physicians in the county not members. One illegal doctor. The health officer's salary is $900.00 per year, and he has done very efficient and satisfactory work. The board of censors are diligent in their work; they have had one irregular (so-called osteopath) to deal with in the past year; he was indicted, tried, and convicted. Another of the same kind opened an office, but upon learning the fate of his predecessor, left for parts unknown.

LAMAR COUNTY MEDICAL SOCIETY.—I am pleased to note that the Lamar county society is in a better condition, and doing better work than last year. The membership is thirteen; holds quarterly meetings. Four meetings were held last year, with an average attendance of seven. There are thirteen doctors in the county, not members of the society. One illegal doctor. There are five medical students attending lectures from this county. The health officer is paid $60.00 per year, and has had fair success in his work.

LAUDERDALE COUNTY MEDICAL SOCIETY.—I am sorry to say that I failed to get any report from this Society. I received a letter from Dr. P. I. Price, of Florence, who said that he had just been elected secretary, treasurer, and county health officer, and that the former secretary had moved out of the county, and carried all records of the society with him.

LAWRENCE COUNTY MEDICAL SOCIETY.—This society is evincing a spirit of progressiveness which is very commendable. A special meeting was held in Moulton, April 4th. The object of the meeting was to reorganize the society, and to create with the physicians who live in the back portions of the county, more interest in the workings of this body. It is also the purpose of this society to take steps to prevent illegal practitioners from practicing in this county; the society having been annoyed no little by these charlatans, during the past years. The membership of the society is fifteen; meetings are held quarterly, with an average attendance of eight. The health officer does fairly good work, and is paid a salary of $100.00. There are two regular physicians in the county not members of the society. No medical students.

LIMESTONE COUNTY MEDICAL SOCIETY.—The only report that I have been able to get from this society, is very unsatisfactory. My reporter says that the membership is thirteen, and that a meeting is held every two years. No meeting last pear at all; all of which is very discouraging, and shows a total want of interest among the doctors of the county. The health officer receives a salary of $120.00. Don't know what success, if any, he has had in collecting vital statistics.

MADISON COUNTY MEDICAL SOCIETY.—I am glad to be able to report Madison County Medical Society as in a good healthy condition and still deserves to be classed

among the best of our county societies; although during the past year, from various causes which I personally know in a great many cases were wholly unavoidable, the attendance has not been so large as heretofore, but the same lively interest is taken in the meetings, and a general feeling of good fellowship exists among the members. At each meeting one or more members, with alternates, are appointed to prepare a paper to be read at the next meeting, or at some future meeting; the plan has proved very satisfactory and successful, and consequently each meeting is looked forward to in anticipation of being very instructive and interesting. Cases are also reported and discussed by almost every member present. The membership of the society is twenty-six; sixteen doctors in the county who are not members. Meetings are held monthly. Ten meetings were held last year, with an average attendance of fifteen members. The health officer receives a salary of $200.00, and has proved very efficient and faithful in his work; has had very good success in getting up the vital statistics of the county. There is only one illegal practitioner in the county, but he is very good natured about it, and says that what little work he does is only to relieve the busy doctors, and to accommodate his neighbors, hence nothing is said or done about it. During the past year two doctors have moved into the county. One moved out. Three applicants have been examined by the board of examiners to practice medicine. Two were granted certificates, one refused.

Marion County Medical Society.—I was unable to visit or send a representative to Marion county, and as my letters were all treated with silent contempt, so far as answering them was concerned, I have no report from this county.

MARSHALL COUNTY MEDICAL SOCIETY.—This society I think can be reported as in a good working condition. The President, Dr. T. H. Casey, to whom I am indebted for my report, has done, and is still doing all he can to build up the society, and carry on the work in the county. The membership is thirteen; four meetings were held last year, with an average attendance of nine. The board of censors have examined one application to practice medicine. Certificate granted. My informant says "they have been sorely afflicted with applicants who wished to name the supervisor, which they would not allow, and that hereafter, they would see to it, that the supervisors were absolutely above suspicion." There is no health officer, as the county does not pay any salary, hence there are no vital statistics for the county. Marshall county I think, is doing very well in most respects, and with such men as Dr. Casey at the head of affairs, we may expect still better and greater results.

MORGAN COUNTY MEDICAL SOCIETY.—The best information I can get from this county is, that the society is a complete failure in every particular. Although there are fourteen members, they have no regular times of meeting; only one meeting held last year, no papers read and no cases reported. The county has a health officer who is paid $100.00 per annum, but don't know what success he has had in collecting statistics.

PICKENS COUNTY MEDICAL SOCIETY.—This county is evidently doing better, for my predecessors for the past two years have had nothing to report from Pickens. Now they have a membership of eighteen; hold quarterly meetings. Four meetings held last year, with an average attendance of ten members. There are eight regular physicians in the county not members of the society. One illegal doctor. Three medical students attending medical lectures. The Health officer receives no salary, and hence has no success in getting statistics.

RANDOLPH COUNTY MEDICAL SOCIETY.—This society is in good condition, and doing excellent work. They have a membership of twenty-two. Four quarterly meetings were held last year, with an average attendance of thirteen. The health officer receives $60.00 per year, and not withstanding the small salary, is doing good work, and has fair success. There are three regular physicians not members. No illegal doctors. One medical student. In a letter from Dr. P. E. Dean, he says, "While we are not occupying the advanced grounds we ought, we are getting nearer the goal. This county is no longer the home of the illegal doctor, and vital statistics are now being collected with encouraging success. Many of our doctors are yet delinquent in making their monthly reports, but it is hoped that they may be yet induced to quit their fogy and non-progressive ways."

SHELBY COUNTY MEDICAL SOCIETY.—This society is still keeping in line and the good work goes on. Has seventeen members, and holds monthly meetings, with an average attendance of ten members. There are eleven physicians not members of the society. No illegal doctors. The health officer does his work fairly well, and has good success. He is paid $200.00 for his services.

ST. CLAIR COUNTY MEDICAL SOCIETY.—St. Clair is still in the same apathetic condition. Little or no interest seems to be taken by the members, as is evidenced by their not holding meetings oftener. Only one meeting held last year, and only two or three in attendance. The health officer gets no salary, but is trying to do the work as best he can, and is meeting with fair success. My reporter says: "Our society has not been able to do much more than hold the organization together. We are peculiarly located, and it is with difficulty that we can get one or two meetings annually. But the interest seems to be better and the outlook more encouraging."

TUSCALOOSA COUNTY MEDICAL SOCIETY.—Tuscaloosa county society has nineteen members, and seven physicians in the county not members of the society, (including one colored doctor.) The society meets every two weeks, with an average attendance of six or eight members. Papers are read and discussed at the meetings, which make them very instructive as well as pleasant. There are no illegal doctors in the county. Four medical students attending lectures. The health officer's salary is $100, and my informant says, has moderately good success in his work.

TALLAPOOSA COUNTY MEDICAL SOCIETY.—The secretary of this society makes all sorts of excuses, and some mighty good promises to do better hereafter. The society has twenty-one members, and is supposed to hold quarterly meetings, but had only one meeting last year, with ten members present. The health officer is doing good work in collecting vital statistics, and has the co-operation of most of the doctors in the county. His salary is $150. There are no illegal doctors in the county. Two medical students attending lectures.

TALLADEGA COUNTY MEDICAL SOCIETY.—The report from this society is about the same as last year. Society has twenty-five members, and there are twelve doctors in the county, not members. Regular quarterly meetings are held, there being four meetings last year, with an average attendance of nine. No illegal doctors in the county. Four medical students attending lectures. Dr. W. E. Thetford is still county health officer, and is doing very efficient work, for which he is paid $144 per year. During the early part of 1898 there was quite a little epidemic of small-pox in the county, but with the aid of the probate court and the city council of Talladega, there was but little trouble in stamping it out.

WALKER COUNTY MEDICAL SOCIETY.—Walker county society has a membership of fifteen; holds regular monthly meetings. Six meetings only were held last year, with an average attendance of seven. There are eleven regular physicians not members of the society. No illegal doctors in the county. Two medical students attending lectures. The health officer does not receive any salary, but is reported as being successful in collecting statistics.

WINSTON COUNTY MEDICAL SOCIETY.—Although numerically small, this society shows an improvement during the past year, and a spirit of progressiveness. The membership of the society is eight; they hold quarterly meetings. Four meetings were held last year, with an average attendance of six, which is a splendid showing, when we consider that some of the members had to ride horse-back, twenty miles or more, to attend the meetings. There are no physicians in the county, not members of the society. No illegal doctors. Two medical students from this county. The health officer does very good work, and has good success. His salary is $50 per year.

This closes my report of the work done in the (32) thirty-two counties comprising my division; and in concluding my report, I wish to thank the gentlemen, members of the different societies, for so kindly replying to letters of inquiry which I have written them.

ANNUAL REPORT OF THE SECRETARY, APRIL 18TH, 1899.

The Book of the Rolls of the county societies is written up to this meeting, showing in the history of each county the number of counsellors, delegates and visitors present at caeh session, also showing whether reports were made or dues paid.

The Book of the Living is not written up to date. The Counsellors seem to have an aversion to giving an epitome of their professional life, or are too modest to report the honors conferred on them, and their contribution to medical literature. They also seem to be unmindful of the fact that it is their duty to furnish the Secretary with a cobinet size photograph to be placed in the Book of Portraits at the time he is raised from Junior to Senior counsellorship.

This Revision of the Roll of Counsellors will make the number of Grand Senior Life Counsellors, Grand Senior Counsellors and Senior Counsellors whose photographs should be in the Book, 80. But we have only 49 portraits.

All of the information that has been obtained has been written, but still it is only a partial record and I ask those present who have not done so to furnish such facts of their lives as should be in the record..

The Book of the Dead I have purposely left unwritten, because I thought best to ask the Board of Censors some questions about it. I have all the data in the historians address and it is about condenseing this that I wish information. All of the counsellors elected at the last

meeting, 8 in number, have accepted the office and signed the pledge.

On February 6th, I perfected arrangements for one and one-third railroad fares with all the roads in the State. If these certificates are left with the Assistant Secretary, Dr. Montgomery, they will be promptly signed and the owners can get them before the adjournment.

On February 1st I sent blanks for society reports to Secretary of each county.

On March 1st I mailed an Annual Circular to each member in the State, 1,100 in all.

On April 1st I mailed a Programme of this meeting to each member and correspondent.

I have had the badges made according to the selection of the President, with the approval of the Senior Censor.

By instruction of the President I had a die of the seal of the Association made and have used it in the Transactions and Programmes.

I would urge the secretaries and treasurers to be more prompt in sending in their reports and shipping lists.

I would also ask that when the county societies hold their annual elections, that they notify me of any changes in their officers so that I may know who to correspond with.

Respectfully,

G. P. WALLER, M. D.,

Secretary.

THE ANNUAL REPORT OF THE TREASURER.

HENRY GAITHER PERRY, M. D., *Treasurer.*

In account with the Medical Association of the State of Alabama, from April 19th, 1898, to April 18th, 1899.

GRAND SENIOR COUNSELLORS.

Baldwin, Benjamin James, Montgomery	$ 10 00
Bragg, Shirley, Montgomery	10 00
Brockway, Dudley Samuel, Livingston	10 00
Cason, Davis Elmore, Ashville	10 00
Fletcher, Richard Matthews, Sr., Huntsville	10 00
Franklin, Charles Higgs, Union Springs	10 00
Gaines, Vivian Pendleton, Mobile	10 00
Goggans, James Adrian, Alexander City	10 00
Goodwyn, Joseph Anderson, Jasper	10 00
Harlan, John Jefferson, Hackneyville	10 00
Hayes, Robert Hughes, Union Springs	10 00
Hill, Luther Leonidas, Montgomery	10 00
Huggins, Jacob, Newbern	10 00
Inge, Henry Tutwiler, Mobile	10 00
Jay, Andrew, Evergreen	10 00
Jones, Capers Capehart, East Lake	10 00
Kendrick, Joel Cloud, Greenville	10 00
Lowry, Samuel Hickman, Huntsville	10 00
Nolen, Abner Jackson, New Site	10 00
Redden, Robert James, Sulligent	10 00
Robertson, Thaddeus Lindley, Birmingham	10 00
Searcy, James Thomas, Tuscaloosa	10 00
Sholl, Edward Henry, Birmingham	10 00
Sledge, William Henry, Mobile	10 00
Stovall, Andrew McAdams, Jasper	10 00
Thetford, William Fletcher, Talladega	10 00
Thomas, James Grey, Mobile	10 00
Trent, Powhatan Green, Roanoke. (See foot note)	.....
Whaley, Lewis, Birmingham	10 00
Wheeler, William Camp, Huntsville	10 00
Wilkerson, Wooten Moore, Montgomery	10 00
Wilkinson, James Anthony, Flomaton	10 00
Total number, 32. Total amount	$ 310 00

SENIOR COUNSELLORS.

Andrews, Glenn, Montgomery	10 00
Blake, Wyatt Heflin, Wetumpka	10 00
Cameron, Matthew Bunyan, Sumpterville	10 00
Carson, Shelby Chadwick, Greensboro	10 00
Coley, Andrew Jackson, Alexander City	10 00
Cunningham, Russell McWhorter, Birmingham	10 00
DeWeese, Thomas Peters, Gamble Mines	10 00
Duggar, Reuben Henry, Gallion	10 00
Gay, Samuel Gilbert, Selma	10 00
Goode, Rhett, Mobile	10 00
Heacock, John William, Alpine	10 00
Heflin, Wyatt, Birmingham	10 00
Hunter, Henry Mitchell, Union Springs	10 00
King, Goldsby, Selma	10 00
LeGrand, John Clark, Birmingham	10 00
Maréchal, Edwin Lesley, Mobile	10 00
McCants, Robert Beall, Faunsdale	10 00
Moon, William Henry, Goodwater	10 00
Parke, Thomas Duke, Birmingham	10 00
Robinson, Christopher A., Huntsville	10 00
Watkins, Isaac LaFayette, Montgomery	10 00
Whitfield, Bryan Watkins, Demopolis	10 00
Wilkerson, Charles A., Marion	10 00
Wilkinson, John Edward, Prattville	10 00
Total number, 24. Total amount	$ 240 00

JUNIOR COUNSELLORS.

Bell, Walter Howard, Oxford	$ 10 09
Bondurant, Eugene DuBose, Mobile	10 00
Brannon, Henry Lee, Eufaula	10 00
Brown, George Summers, Birmingham	10 00
Davis, William Elias Brownlee, Birmingham	10 00
Desprez, Louis Willoughby, Russellville	10 00
Dixon, John, Fayettville	10 00
Frazer, Tucker Henderson, Mobile	10 00
Goodman, Duke William, Mobile	10 00
Graham, William Alexander, Fayette	10 00
Harrison, William Groce, Talladega	10 00
Harper, Robert Franklin, Ozark	10 00
Hill, George Armstrong, Wynette	10 00
Howle, James Augustus, Wetumpka	10 00
Johnston, Lewis William, Tuskegee	10 00

Jones, Julius, Rockford	10 00
Jones, Edward Spears, Gadsden	10 00
McEachern, John Adolphus, Brundidge	10 00
McLaughlin, James Madison, Springville	10 00
McWhorter, George Tilghman, Riverton	10 00
Moody, Fleming Isaac, Dothan	10 00
Moody, Henry Altamont, Bailey Springs	10 00
Perry, Henry Gaither, Greenville	10 00
Quin, William Everett, Fort Payne	10 00
Riggs, Edward Powell, Birmingham	10 00
Robinson, Thomas Franklin, Blocton	10 00
Sutton, Robert Lee, Orrville	10 00
Swann, Joseph Clarke, Wedowee	10 00
Waller, George Platt, Montgomery	10 00
Whitfield, James Bryan, Demopolis	10 00
Williams, John Harford, Columbiana	10 00
Wyman, Benjamin Leon, Birmingham	10 00
Total number, 32. Total amount	$ 320 00

COUNSELLORS ELECT.

Bennett, Benjamin Franklin, Clayton	$ 5 00
Dryer, Thomas Edmund, Huntsville	5 00
Harlan, Aaron LaFayette, Alexander City	10 00
Henley, Albert Thomas, Birmingham	10 00
Hill, Robert Sommerville, Montgomery	10 00
McCain, William Jasper, Livingston	5 00
Pearson, Benjamin Rush, Montgomery	10 00
Sims, Albert Gallatin, Renfro	5 00
Total amount from 8 Counsellors elect	$ 60 00

To Dues from County Medical Societies—

Autauga	$ 8 00
Baldwin	4 00
Barbour	18 00
Bibb	10 00
Blount	.....
Bullock	18 00
Butler	7 00
Calhoun	20 00
Chambers	8 00
Cherokee	6 00
Chilton	2 00

Choctaw	6 00
Clarke	5 00
Clay	4 00
Cleburne	11 00
Coffee	5 00
Colbert	9 00
Conecuh	8 00
Coosa	6 00
Covington	....
Crenshaw	6 00
Cullman	12 00
Dale	11 00
Dallas	20 00
DeKalb	10 00
Elmore	16 00
Escambia	8 00
Etowah	15 00
Fayette	4 00
Franklin	8 00
Geneva	7 00
Greene	.....
Hale	8 00
Henry	10 00
Jackson	11 00
Jefferson	85 00
Lamar	12 00
Lauderdale	6 00
Lawrence	4 00
Lee	.....
Limestone	.....
Lowndes	2 00
Macon	10 00
Madison	20 00
Marengo	15 00
Marion	6 00
Marshall	7 00
Mobile	26 00
Monroe	7 00
Montgomery	33 00
Morgan	7 00
Perry	6 00
Pickens	1 00
Pike	7 00
Randolph	22 00
Russell	4 00
Shelby	7 00

St. Clair	6 00
Sumter	11 00
Talladega	13 00
Tallapoosa	9 00
Tuscaloosa	18 00
Walker	11 00
Washington	4 00
Wilcox	.....
Winston	4 00
Total from county societies	$ 649 00

To Dues from Delegates—

Autauga—M. D. Smith, Prattville	$ 5 00
Baldwin—	.....
Barbour—B. F. Bennett, Clayton	5 00
Geo. W. Hughey, Afton	5 00
Bibb—J. U. Ray, Blocton	5 00
T. E. Schoolar, Centerville	5 00
Blount—D. S. Moore, Clarence	5 00
Bullock—T. P. Harris, Mascot	5 00
Butler—Henry Green, Bolling	5 00
Calhoun—J. M. Whiteside, Oxford	5 00
Chambers—W. H. Hudson, LaFayette	5 00
Cherokee—R. L. McWhorter, Gaylesville	5 00
Chilton—	.....
Choctaw—	.....
Clarke—Jesse M. Cobb, Grove Hill	5 00
Cleburne—T. J. Johns, Edwardsville	5 00
J. D. Cramer, Abernathy	5 00
Coffee—	.....
Colbert—	.....
Conecuh—	.....
Coosa—W. A. Holloway, Kellyton	5 00
E. P. McKinney, Kellyton	5 00
Covington—	.....
Crenshaw—F. M. T. Tankersley, Highland Home	5 00
Cullman—John Yielding, Walter	5 00
Dale—	....
Dallas—R. P. Chisolm, Summerfield	5 00
DeKalb—E. P. Nicholson, Valley Head	5 00
Elmore—J. W. Sewell, Titus	5 00
W. A. Warren, Wetumpka	5 00
Escambia—W. L. Abernathy, Flomaton	5 00
Etowah—R. F. McConnell, Attalla	5 00

W. F. Ford, Hoke's Bluff	5 00
Fayette—F. M. Peters, Fayette	5 00
Franklin—	.....
Geneva—A. R. Chapman, Geneva	5 00
Greene—A. P. Smith, Eutaw	5 00
Hale—	.....
Henry—W. M. Ryals, Cowarts	5 00
Jackson—W. C. Maples, Scottsboro	5 00
Jefferson—J. M. Killough, Huffman	5 00
Cunningham Wilson, Birmingham	5 00
Lamar—W. L. Morton, Vernon	5 00
Lauderdale—J. M. Peerson, Florence	5 00
Lawrence—C. S. Chenault, Mt. Hope	5 00
Lee—	.....
Limestone—	.....
Lowndes—S. W. Purifoy, Lowndesboro	.....
Macon—	.....
Madison—Claud Pettus, Rep	5 00
T. E. Dryer, Huntsville	5 00
Marengo—W. S. Tucker, Luther's Store	5 00
C. B. Whitfield, Demopolis	5 00
Marion—T. J. Springfield, Quin	5 00
Marshall—W. P. Hall, Hyatt	5 00
Monroe—T. A. Casey, Albertville	5 00
Mobile—P. J. Glass, Mobile	5 00
S S. Tam, Mobile	5 00
Montgomery—M. B. Kirkpatrick, Montgomery	.....
H. B. Wilkinson, Montgomery	.....
Morgan—	5 00
Perry—O. L. Shivers, Marion	5 00
Edward Swan, Sprotts	5 00
Pickens—	.....
Pike—W. S. Sanders, Milo	5 00
J. N. Watkins, Tarentum	5 00
Randolph—W. L. Heflin, Roanoke	.....
Russell—W. B. Hendrix, Hurtsboro	5 00
Shelby—D. L. Wilkinson, Montevallo	5 00
St. Clair—J. W. Ashe, Springville	5 00
Sumter—W. J. McCain, Livingston	5 00
A. L. Vaughan, Cuba	5 00
Talladega—A. G. Sims, Renfro	5 00
S. W. Welch, Alpine	5 00
Tallapoosa—W. G. Carlton, Dudleyville	5 00
Tuscaloosa—J. M. Clifton, North Port	5 00
Walker—D. M. Davis, Cordova	5 00

Washington—Charles LeBaron, Yellow Pine	5 00
W. W. Shoemaker, Frankville	5 00
Wilcox—	.....
Winston—W. T. Gramlee, Lynn	5 00
Total	$ 305.00

Two delegates, Purifoy of Lowndes and Heflin of Randolph did not pay their fees. The delegates from Montgomery county settled with Dr. Jackson.

RECAPITULATION

Receipts.

Received from W. C. Jackson, M. D., former Treasurer, balance on hand April 19th, 1898		$ 1,004 68
Receipts from April 19th, 1898, to April 18th, 1899—		
To Annual Dues from 96 Counsellors	$ 930 00	
" " 60 County Societies	649 00	
" " 61 Delegates	305 00	
" " E. L. Maréchal for 1897	10 00	
" " Bullock County for 1897	24 00	
" " Choctaw County for 1897	5 00	
Cash for exchange on check Dr A. T. Henley	15	
Rent of floor space at Birmingham	55 15	$ 1,978 30
Total		$ 2,982 98

Disbursements.

By expenses Birmingham session	$ 82 80	
Assistant Secretary Birmingham session	20 00	
Sargeant at Arms	12 00	
Telegram Dr. Chas. Wheelan to Treasurer	45	
Salary Sec., Dr. G. P. Waller, March 8th, 1898 to April 22, 1898	26 33	
Salary Sec, Dr. G. P. Waller, to April, 1899	250 00	
Postage and expense Secretary	4 30	
H. M. Ashe, Typewriter supplies for Sec	6 50	
Ed. C. Fowler, stationery for Secretary	8 30	
The Brown Printing Co., pub. Transac. etc	1,008 76	
" " " ship. "	180 25	
" " " printing for Sec	12 75	
" " " " Treas	22 45	
Cabaniss & Weakley	25 00	
The Brown Ptg. Co., env. and stamps for Sec.	29 50	
G. P. Waller, Sec., for badges	20 00	
Salary H. G. Perry, Treasurer, April, 1898, to April, 1899	100 00	
Stamps H. G. Perry, Treasurer	10 00	$ 1,814 54
Balance on hand		$ 1,168 44

Dr P. G. Trent, Grand Senior Counsellor, paid Dr. Jackson and is marked "clear of the books." Three Junior Counsellors, Drs. W. T. Hamilton, H. P. McWhorter and M. W. Murray, failed to pay their dues and are dropped from the roll.

Six county societies, Blount, Covington, Greene, Lee, Limestone and Wilcox were delinquent in dues.

REPORT OF PUBLISHING COMMITTEE FOR THE YEAR ENDING APRIL 18TH, 1898.

Your Committee on Publication herewith submits its report for the past year:

The Association adjourned in Birmingham on April 22. On April 28, six days after, we gave the printers the first copy and pushed the work as rapidly as possible. The first shipment of books was made August 17, and we continued to ship as fast as we could get the shipping lists from the treasurers of the County Societies. The Transactions of 1898 contain 462 pages, and the volume is the largest published since 1885. The cost of issuing it was—

Printing 1,100 volumes	$784 16
Binding	187 00
Postage	180 35
Total	$1,151 51

This includes printing, binding, wrapping and postage.

A chart had to be made to illustrate the paper by Dr. H. A. Moody. This cost $3.00.

The die of the seal of the Association also cost $3.00.

The Treasurer's office was furnished with a set of books, blanks, receipts, circulars, stationery, etc , amounting to $23.60.

Stationery, certificates, seals, etc., bought for Secretary's office cost $6.10.

The largest item of expense was—

1,200 Annual Circulars	$ 7 00
1,500 Programs	12 00
2,500 1 cent stamped envelopes	29 50
	$48 50

Summarized statement of publications received by the State Board of Health Library for the year 1898:

Annual Reports of State Boards of Health	36
Annual Reports City Boards of Health	13
Transactions State Medical Societies	14
Government publications	96
Miscellaneous publications	88
Total	247

Respectfully, G. P. WALLER, M. D.,
Secretary.

MISCELLANEOUS BUSINESS.

Dr. J. T. Searcy offered the following resolutions :

Whereas, at the meeting of "The American Medical Association," held at Denver, in 1898, a resolution was adopted which, if carried into effect, would virtually exclude from membership a large proportion of its Southern members; and whereas, the said resolution was adopted without discussion, under a misconception of the views of "The Southern Medical College Association"; and whereas, the requirements stipulated in said resolution could not be legally carried out by the parties who would be excluded by its operation; and whereas, we do not believe "The American Medical Association" desires to exclude from membership men who have been its staunch supporters; and whereas, the elevation of the standards of medical education has always been one of the principal objects of "The Medical Association of Alabama," therefore,

Resolved, That this Association fully endorses all legitimate and practical efforts in the direction of higher medical education.

2. *Resolved*, That the imposing of a time limit which could not be carried out by the members of "The Southern Medical College Association," and also of a penalty in default of compliance therewith, was unjust, and in violation of the organic law and legal jurisdiction of the "American Medical Association."

3. *Resolved*, That this Association respectfully requests "The American Medical Association" to repeal the resolution in question, and to enact such measures only as can be complied with by "The American Medical College Association" and "The Southern Medical College Association" without violation of existing obligations to matriculated students. which obligations are enforceable by law.

4. *Resolved*, That a copy hereof be forwarded to the President and to the Secretary of "The American Medical Association," and also to the "Journal of the American Medical Association," with the request that it be published.

On motion the resolutions were referred to the Board of Censors.

The meeting then adjourned to 8 P. M.

EVENING SESSION.

The Association was called to order at 8:20 P. M. by President Moody.

The meeting was opened with prayer by Rev. G. C. Tucker, of Mobile.

REGULAR REPORTS.

"The Sanitation of Prisons," was the subject of a paper presented by Dr. W. H. Blake, of Wetumpka.

The paper was discussed by Drs. Marechal and Sanders, of Mobile, and Dr. Henley, of Birmingham, the discussion being closed by the author of the paper.

The paper will be found printed in the Appendix of Medical and Sanitary Papers.

The next paper presented was by Dr. W. E. B. Davis, of Birmingham, on "Neuroses Sometimes Following Oophorectomy, their Duration and Treatment."

This paper will be found in the Appendix.

"Antipyretics, their Uses and Limitations" was the subject of a paper by Dr. T. H. Frazer, of Mobile, which will also be found printed in the Appendix.

The meeting then adjourned to 9 A. M. to-morrow morning.

PROCEEDINGS OF THE SECOND DAY.

WEDNESDAY, April 19—MORNING SESSION.

The Association was called to order at 9:20 by President Moody.

CONTINUATION OF REGULAR REPORTS.

"The Surgical Treatment of Tuberculosis" was the theme of a paper read by Dr. Goldsby King, of Selma, which was discussed by Dr. H. T. Inge, of Mobile.

This paper will be found in the Appendix.

"The Epidemic of Small-pox in Jefferson county in 1897–98" was the subject of a paper presented by Dr. W. H. Wilder, of Birmingham.

This paper was discussed by Drs. Sanders, Barclay, Andrews, Blake, Greene, Robertson, Waller, Sholl, Dug-

gar, Williams, McKittrick, Cunningham and Casey, the discussion being closed by Dr.Wilder, the author of the paper.

The paper is printed in the Appendix.

JEROME COCHRAN LECTURE.

The hour of 11 A. M. having arrived the President announced the special order to be, the Jerome Cochran Lecture, an exercise established last year in honor of the memory of Dr. Jerome Cochran, deceased.

Dr. J. T. Searcy, of Tuscaloosa, having been appointed by President Moody to deliver the first lecture, proceeded to do so, selecting as his theme, "What is Insanity?"

In addition to the members of the Association, there were present to hear the lecture a number of the citizens of Mobile, a fair proportion of whom were members of the "Legal Profession."

The printed lecture will be found in the Appendix.

"An Epidemic of Typhoid Fever, near Bear Creek, Colbert County," was the subject of a paper by Dr. G. T. McWhorter, of Riverton. This paper was read by Dr. W. C. Wheeler, of Huntsville, who stated that Dr. McWhorter, whilst on his way to attend this meeting, was overtaken by a telegram bringing him news of the destruction of his home by fire. Naturally, he returned to his family, and therefore could not be present at this meeting.

The paper was received with a great deal of interest on the part of the Association, and was freely discussed. The following gentlemen having participated in the discussion: Drs. Moody, Cameron, Blake, Casey, Perry, Stovall, Henley, Cunningham and Sholl.

Dr. Wheeler closed the discussion.

Dr. Sanders, by permission, introduced the following resolutions:

1. *Resolved*, That The Medical Association of the State of Alabama does hereby tender to Dr. McWhorter and family genuine sympathy for the disaster that has befallen them in the loss of their home by fire

2. *Resolved*, That these resolutions be spread upon the minutes of this meeting, and that a copy be sent to Dr. McWhorter and family.

The resolutions were unanimously adopted.

Dr. Wheeler offered the following preamble and resolutions:

WHEREAS; Dr. G. T. McWhorter, a Counsellor of this Association, left his home on the 17th inst. to attend this meeting, but was called back by a telegram informing him that his home had been burned, and that his wife and children had barely escaped with their lives, therefore,

Resolved, That Dr. G. T. Whorter be excused for non-attendance at this meeting, and permitted to retain his membership in the College of Counsellors on the payment of his annual dues.

Signed, W. C. WHEELER, M. D.
A. M. STOVALL, M. D.

The preamble and resolution were referred to the Board of Censors.

The meeting then adjourned to 3 P. M.

APRIL 19—AFTERNOON SESSION.

The meeting was called to order at 3 P. M. by President Moody.

REGULAR REPORTS CONTINUED.

"Sanitation of Cities." This subject was presented by Dr. Glenn Andrews, of Montgomery, his paper being accompanied by a map of the City of Montgomery, intended to support some of the positions contended for.

The paper was discussed by Drs. Fletcher, Blake and Wilder, and will be found printed in the Appendix.

Dr. L. L. Hill, of Montgomery, next presented a paper on "Retention of the Testicle, with Reports of Cases."

This paper was discussed by Dr. R. F. Michel, of Montgomery, and will be found in the Appendix.

"The Late Epidemic of Yellow Fever" was the subject of a paper by Dr. W. H. Sanders, Health Officer of Alabama.

The subject was discussed at length by Dr. R. D. Murray, of the Marine Hospital Service, and by Drs. McKittrick and Wheeler.

The paper, and Dr. Murray's discussion thereof will be found in the Appendix.

MISCELLANEOUS BUSINESS.

Invitations were extended to the Association by the Faculty of the Medical College of Alabama, to visit the College, and to attend a "Reception" at the Manassas Club.

The following preamble and resolutions offered by Dr. W. C. Wheeler, were adopted:

WHEREAS, The State Health Officer, Dr. Sanders, by active and efficient work protected the State of Alabama from a threatened invasion of Yellow Fever in the Summer of 1898, be it

1. *Resolved*, That the State of Alabama, and especially its Medical Profession, owes him an expression of its appreciation of his splendid work.

2. *Resolved*, That the Medical Association of the State of Alabama thanks him for his untiring and successful efforts and congratulates him upon their result.

The meeting then adjourned to 8 P. M.

EVENING SESSION.

The meeting was called to order at 9 P. M. by President Moody.

In addition to the members of the Association, there was a large audience of ladies and gentlemen present to hear the following address:

"Historian's Address;" by Dr. J. W. Heacock, of Alpine. At the last moment Dr. Heacock was prevented from leaving home by professional duties he could not disregard, therefore, he sent his address by Dr. S. W. Welch, who read it gracefully and clearly.

"Monitor's Address;" delivered by Dr. R. H. Duggar, of Gallion.

"Annual Oration;" delivered by Dr. G. C. Chapman, of Birmingham.

These addresses will be found in the Appendix.

The meeting then adjourned, and the members repaired to the elegant rooms of the Manassas Club, where they were cordially received and elegantly entertained by the Faculty of the Medical College of Alabama, there being also present a large number of the prominent citizens and handsome ladies of Mobile.

PROCEEDINGS OF THE THIRD DAY.

THURSDAY, APRIL 20—MORNING SESSION.

Called to order at 9 A. M. by the President.

VOLUNTEER PAPERS.

On motion of Dr. Hill of Talladega, Dr. Goggans was requested to read his paper on "appendicitis" immediately after Dr. Brown's paper on the same subject in order that both papers could be discussed at the same time.

"Appendicitis"; G. S. Brown, M. D., of Birmingham. In the absence of Dr. Brown this paper was read by Dr. C. Wilson, of Birmingham.

Dr. J. A. Goggans, of Alexander City, then read his paper on "Appendicitis."

Both papers were discussed together by Drs. E. P. Riggs and W. E. B. Davis, of Birmingham. The discussion being closed by Drs. Wilson and Goggans.

The next paper was by Dr. T. A. Casey, Albertville, on "The Prophylactic Treatment of Tuberculosis."

This paper was discussed by Drs. C. Wilson and R. H. Duggar.

"The Treatment of Hypertrophy of the Prostate Gland" was the subject of a paper presented by Dr. C. M. Franklin, of Union Springs.

The next paper was presented by Dr. G. Hartung, of Cullman, on "Protoplasma, and its Relation to Life." This paper was discussed by Dr. Sholl.

"Disorders of the Nervous System Due to Gynecic Diseases" was the subject of paper by Dr. R. S. Hill, of Montgomery.

MISCELLANEOUS BUSINESS.

Dr. Glenn Andrews, of Montgomery, introduced the following resolutions, which, upon motion, were referred to the Board of Censors.

Resolved, That the president appoint a committee of three who shall investigate the alms houses, poor houses, and jails in the different counties throughout the State and report at the next annual meeting of this Association the results of their investigation as regards the management, condition, and general conduct of these institutions.

Resolved, That not more than two hundred dollars be appropriated from the funds of this Association to defray the expense of the committee in making this investigation.

The President announced the following as the Committee on the Nomination of Counsellors: Drs. W. C. Wheeler, E. P. Riggs, R. H. Hayes, M. B. Cameron, S. C. Henderson.

The meeting adjourned at 12:30 P. M. to accept a boat ride on the River and Bay, tendered by Dr. W. H. Sanders.

The members had the pleasure of meeting a large number of the ladies and gentlemen of Mobile on this ride, and also of seeing the immense "tonnage" lying at the Mobile wharves.

April 20—Afternoon Session.

Called to order at 3 P. M. by the President.

CONTINUATION OF VOLUNTEER PAPERS.

Dr. R. S. Hill's paper was discussed by Drs. Sholl, Jackson, and Davis. The discussion was closed by Dr. Hill.

The next paper presented was by Dr. W. R. Jackson, of Mobile, on "Lymphoid Tissues and Diseases of the Same."

"A General Consideration of the Serum Therapy" was the subject of a paper by Dr. E. L. Marechal, of Mobile.

This paper was discussed by Drs. Wheeler, Gaines, and Furniss. The discussion was closed by the author of the paper.

"Reports of Surgical Cases" was the subject of a paper by Dr. E. P. McCollum, of Greensboro.

Dr. J. F. Peavy, of Asheville, N. C., formerly of this State, read a paper on "A Treatment of Tuberculosis Based on Physiologic Principles," which embodied original views.

All of the above papers will be found in the Appendix.

The meeting then adjourned to 8 P. M.

April 20—Evening Session.

Called to order at 8:12 P.M. by the President.

CONTINUATION OF VOLUNTEER PAPERS.

"Chronic Hypertrophic Rhinitis" was the subject of a paper by Dr. H. S. Persons, of Montgomery.

Dr. W. M. Ryals, of Cowarts, next read a paper on "Hæmorrhagic Malarial Fever," which was discussed by Dr. D. S. Brockway, of Livingston.

"The X Rays in Diagnosis" was the theme of a paper by Dr. J. Grey Thomas, of Mobile, which was discussed by Drs. Jackson and Inge.

All of the above paper will be found in the Appendix, together with the following, read by title, for lack of time to hear them:

"Four Cases of Monstrosities in the Same Family," by Dr. W. M. Hestle, of Beuna Vista.

The meeting then adjourned to 9 A. M. tomorrow, after which the members repaired to Klosky's Restaurant, where they were bounteously and elegantly entertained at a "Lunch" given by the Medical Society of Mobile County, a number of prominent citizens of Mobile being "sandwiched" in between the doctors at table, and in response to toasts.

PROCEEDINGS OF THE FOURTH DAY.

April 21—Morning Session.

Called to order at 9 A. M. by the President.

Owing to the fact that the Board of Censors had given notice that they were not quite ready to submit their "Report," it was decided by a vote of two-thirds of the members to change the order laid down on the programme and to proceed now with the Revision of the Rolls, and then to hear the Report of the Board of Censors.

The Four Rolls were then revised and will be found in their proper places.

The Board of Censors then submitted the following report:

THE TWENTY-SIXTH ANNUAL REPORT OF THE BOARD OF CENSORS, INCLUDING REPORTS OF THE STATE BOARD OF MEDICAL EXAMINERS AND COMMITTEE OF PUBLIC HEALTH.

In submitting this Report the records remind us that this Association, as organized under its present Constitution, has completed the first quarter of a century of its corporate existence, and has advanced one year into the second quarter.

A successful test extending over such a period would seem to confirm beyond dispute the soundness of the principles embodied in its plan of organization, and to furnish an open guarantee of the indefinite longevity of that plan.

Looking back from this first quarter post and contrasting what we are to-day with what we were twenty-six years ago, we cannot be otherwise than proud of the fruits achieved.

Whilst many of those who were leaders in the struggles of the past have fallen, yet we feel justified in believing and affirming that their survivors are as true and loyal to the principles of our Constitution as were its founders, and that they will courageously carry on the work bequeathed them, confident that all of the high purposes set forth in our organic law will sooner or later be accomplished.

THE PRESIDENT'S MESSAGE.

With the views expressed by the President as to the clamor on the part of some members of the Association for changes in its organic law; and also with the position he takes as to the inadvisability of withdrawing

licensing power from county boards of examiners and concentrating it in the State board, we are in entire accord. His advice to the members to familiarize themselves with the plan of our organization by carefully studying the Book of the Rules, we regard as timely, and urge that it be followed. He also reminds the members that in order to keep informed with the current work of the Association they should regularly read the annual volume of Transactions.

FIRST RECOMMENDATION.

The President recommends that provision be made for defraying the necessary expenses of the president and vice-presidents of the Association, incurred in visiting county societies that especially need attention, such societies to be designated by the board of censors.

Whilst reasons can be advanced in support of this recommendation, we can at the same time see other reasons against it. The uniform policy of this Association has been to vigilantly guard its financial resources. The idea has been fostered that members honored with high official positions, such as president and vice-president, should be willing to contribute reasonably out of their private resources for the promotion of the great objects of our organization. Manifestly, the offices of secretary and treasurer stand upon entirely different footings. The duties of these positions involve much clerical and other work and the terms thereof extend over a series of years.

After mature consideration of this recommendation of the president, we feel constrained to advise that it be not concurred in.

SECOND RECOMMENDATION.

The President recommends that the committee of publication be composed of the retiring president, the senior

censor and the secretary, and assigns good reasons for such composition of the committee.

With this recommendation we fully agree, and in order to carry it out have drawn up the following ordinance:

Be it Ordained by the Medical Association of the State of Alabama, That the committee of publication shall consist of the retiring president, the senior censor, and the secretary; that said committee shall make all contracts for the printing and distribution of the annual volume of Transactions, and supervise the publication thereof, with authority to admit such papers, reports, and discussions as they may deem proper.

The President next discusses very delicately, but very wisely, the growing tendency to the introduction of "political methods" into the elections of this Body, and points out very clearly many of the evils to which such methods will inevitably lead. All will agree that no graver danger to the perpetuity and usefulness of this Association can possibly arise than the one just mentioned. The preservation of our organization, with its noble purposes, demands that this evil, while yet of recent growth, be crushed beyond resurrection.

That this can be done no one will deny; neither does it require any search to find the way of doing it. Defeat overwhelmingly every man who seeks to put himself into office through "political methods" and the object is accomplished. Candidates should be unknown in a Body like this. Members should be too proud to solicit the support of their fellows for official position, but, relying upon merit, should unconsciously and courageously await a spontaneous offer of honors, which coming unsought would be creditable alike to the givers and receivers.

No better evidence of the unfitness of a member for office could be furnished than that of a personal canvass to secure it, or an appeal to friends to conduct a canvass

in his behalf. When approached by office-seekers members should have the courage to resent such solicitations, and should not hesitate to express their indignation and disgust.

If the practice alluded to be permitted to continue, very soon our meetings, instead of being devoted to scientific and sanitary discussions and the enjoyment of social pleasures, will degenerate into disgraceful caucuses, in which those men willing to descend to political methods will wrangle and bargain for office, and to defeat whom the best men of the Association will be driven to adopt electioneering methods. Thus, the entire time of our meetings will be monopolized by candidates and campaigns, bargains and combinations, with all of the ill feelings and enmities that such struggles will necessarily engender. Rapid decay and early death of our organization would be the just penalty for permitting such practices. To avoid these disasters we recommend that this Association do now declare that all office-seeking be pronounced undignified and unethical, and that any member who engages in it should be defeated and consigned to disgrace.

Whenever elections are in order members should look for merit and should justly reward it. By this standard alone should ballots be cast.

Members should have no fear that their merits will be overlooked, for, whenever offices are to be filled, those having power to vote are willing, yea anxious, to find the most deserving men to fill them. Ripe fruit falls easily, and when gathered proves grateful to the taste; whilst an effort is required to pluck green fruit, and when plucked it proves ungrateful and worthless. So is it with honors in a body of men united for scientific and sanitary purposes, and who enjoy ample opportunity for judging one another's merits. The youngest mem-

ber of this Association will live, unless prematurely cut off, to wear all of the honors to which his work and worth entitle him.

We are satisfied that good men in the Association have, without stopping to consider its demoralizing tendency, given encouragement to, and promised support of, ambitious and enterprising candidates, but we are also satisfied that they now stand ready to help put the seal of eternal condemnation upon practices that are far below that lofty ethical standard we should resolve to maintain.

REPORTS OF THE VICE-PRESIDENTS.

The reports of the vice-presidents show that they have done faithful and efficient work, for which, in behalf of the Association, we wish to make cordial acknowledgment. They have proven themselves faithful officials and are entitled to that credit due for work well done.

THE REPORT OF THE SECRETARY AND THE BOOK OF THE ROLLS.

We find the report of the Secretary to be in order, and the Book of the Rolls written up to date, as far as the data therefor could be obtained.

REPORT OF THE COMMITTEE OF PUBLICATION.

The report of this committee is satisfactory, and shows that their work in getting out the last volume of Transactions was prompt.

THE REPORT OF THE TREASURER AND THE BOOK OF ACCOUNTS.

We have examined the accounts of the Treasurer and find them correct. His system of book-keeping meets with our entire approval. We recommend that he be

paid the sum of twenty-three dollars and seventy-five cents for extra services rendered and expenses incurred at the Birmingham session of 1898.

THE ACCOUNTS OF THE STATE HEALTH OFFICER.

We find these accounts correct and recommend that they be approved.

REVISION OF THE MINUTES OF 1898.

The only material error we find in the minutes is a statement on page 148 of the Transactions of last year, to the effect that two resolutions offered by Dr. R. M. Cunningham were adopted. It is our belief that the resolutions were never put to the vote and if this be true, they could not have been adopted. The Board has taken this view, and in a later part of this Report will discuss the resolutions, in accordance with the invariable rule of this Association, namely, that all resolutions affecting the plans and policies of the Association shall be referred to the Board of Censors for consideration, and when reported back with recommendations by that Board, that such recommendations shall be subject to adoption, amendment, or rejection, as the Association may deem best.

DELINQUENT COUNTY SOCIETIES.

At the last meeting of the Association the following named counties were wholly delinquent; that is, delinquent as to delegates, dues, and reports: Covington, Lee, Morgan, and Wilcox.

Communications have been addressed to the respective presidents of the societies named, urging them to provide for compliance by their several societies with all constitutional obligations at this meeting.

LEGISLATION.

At the recent meeting of the General Assembly, a quarantine law, applying to internal quarantine was passed, a copy of which is herewith submitted.

A BILL

To be Entitled An Act to Provide a System of Quarantine for this State.

SECTION 1. *Be it enacted by the General Assembly of Alabama*, That quarantine shall be enforced by the state, by counties, and by incorporated cities and towns, in accordance with the provisions of this act.

SEC. 2. *Be it further enacted*, That wherever in this act rights are granted to, or duties imposed upon, the state board of health or a county board of health, it shall be understood that such rights and such duties may be exercised or executed by the committee of public health respectively of said boards, as their legal and accredited agents.

SEC. 3. *Be it further enacted*, That it shall be the duty of the governor, whenever he deems it necessary, or whenever so advised by the state board of health, to proclaim quarantine, and when proclaimed, it shall be the duty of said board of health to enforce such quarantine, under such regulations as may be, from time to time, prescribed.

SEC. 4. *Be it further enacted*, That the state health officer, or any other member of the state board of health designated by him, shall have the authority to go into any place in this state for the purpose of making such investigations as shall determine the necessity for quarantine. Quarantine may be established pending such investigation, or upon receipt of authentic information of the existence of a quarantinable disease at any place from which such disease is likely to invade this state, or any portion thereof Should permission for such investigation into the nature of a disease as herein provided for be refused by the authorities of any place outside of this State such refusal will constitute ground for declaring quarantine against such place.

SEC. 5. *Be it further enacted*, That the quarantine authority of the state shall be paramount to that of any county, city, or town therein. All state quarantine officers and guards, upon presentation of such credentials and compliance with such regulations as may be prescribed by the state board of health, shall be permitted to pass all quarantine lines established by county, city, or town authority.

Any person who wilfully interferes with such officials and guards, when in the discharge of their duty, shall be guilty of a misdemeanor, and on conviction shall be fined not less than fifty nor more than one hundred dollars for each offence.

SEC. 6. *Be it further enacted*, That when proclamation of quarantine has has been issued by the governor, the state board of health, acting through the state health officer, shall be authorized to make such modifications of, or additions to, the regulations originally adopted as circumstances may require, and the said state health officer shall report the same to the governor, with the reasons therefor.

SEC. 7. *Be it further enacted*, That during the existence of quarantine, State or local, the supervision of trains on all railroads, except such as have both termini in the same county, and of all steamboats and watercraft, affected by such quarantine, shall be placed under the state board of health: provided, that the quarantine authorities of any county, incorporated city, or town traversed by such roads, or to which such steamboats or watercraft shall ply, may decline to receive freights, mails, or express matter from a place infected with a quarantinable disease, of which refusal the said authorities must give the state health officer immediate notice, and provided further, that all trains on said roads shall be permitted to pass with open windows, if the passengers and crews thereon so desire, and to stop for fuel, water, and provisions at such stations as are as remote as practicable from thickly inhabited places. Steamboats and other watercraft shall have the privilege of stopping at similar places for necessary supplies.

SEC. 8. *Be it further enacted*, That any person who makes affidavit before a quarantine officer or guard, engaged in enforcing quarantine for the protection of a place which said person wishes to enter, and who furnishes such other evidence as may be prescribed by the state board of health, that he has not since the appearance of a quarantinable disease, then existing, been in any place against which quarantine has been legally proclaimed, shall be permitted to enter or remain in the place to which he desires to go. Any person who has been in a place then under quarantine by the authority of the State, or by that of a county, city, or town with the approval of the state board of health, and who has since complied with the requirements as to detention and disinfection, one or both, prescribed or approved by the state board of health, and who shall make affidavit thereto, and furnish such other evidence thereof, as said board may prescribe or demand, shall be permitted to enter, or remain in, any place in this State.

Any quarantine officer or guard, or other person, who violates the provisions of this section, shall be guilty of a misdemeanor, and on conviction shall be fined not less than fifty nor more than one hundred dollars for each offence.

SEC 9. *Be it further enacted,* That upon the recommendation of the board of health of a county, and subject to the approval of the state board of health, quarantine may be proclaimed for a county by the probate judge thereof, or in case of his inability to act then by the presiding officer of the board of commissioners, or of revenue, and for an incorporated city or town by the mayor or chief executive officer thereof: provided, that in case of emergency quarantine may be proclaimed by said officers without such recommendation, subject, however, to the approval or modification of the board of health of the county.

When quarantine has been proclaimed for a county, incorporated city, or town, in accordance with the provisions of this section, its enforcement shall be entrusted to the board of health of the county, the orders of which board shall be executed by the health officers of the county, city, or town, respectively.

SEC. 10. *Be it further enacted,* That when a contagious or infectious disease of quarantinable nature exists in a part of a county, the remainder of the county, and any incorporated city or town therein, may establish quarantine against the infected portion or portions of the county in accordance with the following provisions:

If a majority of the committee of public health, acting for the board of health of the county, reside in the uninfected portion thereof such majority shall have the power of the full committee, as defined in the preceding section of this Act. If, however, a majority of the said committee reside in the infected portion of the county, then said committee can no longer act, and in that event the uninfected portion of the county may establish quarantine as follows:

The judge of probate, the president or any two members of the board of commissioners, or of revenue, if they, or either, reside in the uninfected portion of the county, may issue, in the order named, and upon the recommendation of the county health officer, in case he resides in the uninfected portion of the county, or in default of such residence, or on account of his absence from the county, then without such recommendation, a proclamation of quarantine against the infected portion or portions of the county, subject to the approval or modification of the state board of health

Likewise, the mayor, or chief executive officer, of any incorporated city or town in the uninfected portion of the county, may issue, on the recommendation of the health officer of his city or town, or in the absence of such an officer then without such recommendation, a proclamation of quarantine against the infected portion of the county, subject to the approval or modification of the state board of health.

A proclamation of quarantine, issued in accordance with the provisions of this section by the judge of probate, the president or any two members of the board of commissioners or of revenue, for the

protection of a portion of a county, shall be enforced by the health officer of the county, provided he resides in the uninfected portion of the county, but in case he does not so reside, or in the event of his absence or disability, then such proclamation shall be enforced in such way as the officer issuing the same may direct.

A proclamation of quarantine, issued by the mayor, or chief executive officer, of an incorporated city or town, in accordance with the provisions of this section, shall be enforced by the health officer of the city or town, and in case of his absence or disability, then in such way as the officer issuing the proclamation may direct.

The expense of enforcing any quarantine for a county or for a portion thereof as provided for in this and the preceding section, shall be defrayed by the board of commissioners, or of revenue, of the county, that incurred in conducting a quarantine for an incorporated city or town shall be defrayed by the authorities of the city or town declaring the quarantine.

SEC. 11. *Be it further enacted,* That every quarantine declared or established by the authority of any county, incorporated city, or town in this State, together with the regulations prescribed thereunder, shall be forthwith reported to the state health officer by the health officer of the county, city or town establishing or conducting such quarantine.

Any health officer violating this section shall be guilty of a misdemeanor, and on conviction shall be fined not less than fifty nor more than one hundred dollars for each offense.

SEC. 12. *Be it further enacted,* That written authority to act as a quarantine officer for this State, or for any county, incorporated city, or town therein shall entitle the holder thereof to board any railroad train—passenger or freight—and any steamboat or other watercraft, in this State, and ride thereon, free of cost, to such place or places as the discharge of his duties may demand.

Any conductor of a railroad train—passenger or freight—or captain or other officer of a steamboat or other watercraft in this State who violates the provisions of this section shall be guilty of a misdemeanor, and on conviction shall be fined not less than fifty nor more than one hundred dollars for each offense.

SEC. 13. *Be it further enacted,* That any person, conductor, captain, agent, or manager operating either for himself or for a corporation, a railroad, steamboat or other conveyance for the transportation of passengers or freight who shall knowingly transport any person or thing in violation of the provisions of this act shall be guilty of a misdemanor, and on conviction shall be fined not less than one hundred nor more than five hundred dollars for each offense.

SEC. 14. *Be it further enacted,* That any quarantine officer or guard, or person assuming to act as such, who uses any violence, or displays a deadly weapon, for the purpose of intimidating people, and thus

enforcing compliance with his orders, shall be guilty of a misdemeanor, and on conviction shall be fined not less than one hundred nor more than two hundred dollars for each offence: provided, that any legal quarantine officer or guard may, without warrant, arrest a person who attempts to violate a quarantine regulation, and carry such person either to a designated place of detention, or before an officer having jurisdiction of such offences.

SEC. 15. *Be it further enacted*, That any person who wilfully swears or affirms falsely in regard to any material matter or thing upon any oath or affirmation authorized by this act shall be guilty of a misdemeanor, and on conviction shall be fined not less than one hundred nor more than five hundred dollars for each offence, and may also be imprisoned in the county jail for not more than six months.

SEC 16. *Be it further enacted*, That any person who knowingly and wilfully resists arrest by any quarantine officer or guard shall be guilty of a misdemeanor, and on conviction shall be fined not less than one hundred nor more than two hundred dollars for each offence.

SEC. 17. *Be it further enacted*, That the sum of ten thousand dollars, or so much thereof as may be necessary, is hereby annually appropriated out of any sums not otherwise appropriated, to defray the expenses that may arise under the operation of this Act,—the said appropriation, or any part thereof, to be paid by the State Treasurer on warrants issued by the state Auditor, and these to be based on requisitions signed by the state health officer, and approved by the governor. The state board of health shall annually make to the governor a report by items of all expenditures incurred under this act.

SEC. 18. *Be it further enacted*, That all laws and parts of laws in conflict with this act be and are hereby repealed.

It will be seen that the above law is constructed in strict accord with the principles that underlie our public health system, and that it is intended to correct the incongruities and conflicts of our former quarantine laws. Members are urged to read the new law very carefully, so as to familiarize themselves with all of its provisions. The committees of public health of the several counties are liable to be suddenly called upon to carry out the provisions of the law, and in order to do this intelligently and properly they should thoroughly understand them.

An effort was made to secure the passage of two vaccination bills, in order to give us the power necessary for exterminating small-pox from the State, but we regret to say this effort failed. It would be a long story to tell how it failed, therefore we leave it untold.

The bills mentioned are herewith submitted for the information of the members.

A BILL

To be Entitled An Act to Provide for the Vaccination of Pupils who Attend the Schools and Colleges of this State.

SECTION 1. *Be it enacted by the General Assembly of Alabama*, That it shall be the duty of the county health officer of every county in this State and also the duty of the health officer of every incorporated city and town in this State, that employs such an officer, to vaccinate and re-vaccinate, under such rules as may be prescribed by the county board of health, all pupils who attend the public schools and colleges of their respective counties, cities, and towns.

SEC. 2. *Be it further enacted*, That any pupil who refuses, or who fails by reason of repeated absence from school or college, on the occasions of the visit thereto of the vaccinating officer, to be vaccinated or re-vaccinated, in accordance with the provisions of this act, shall be debarred from attendance upon any of the said schools or colleges of this State: *provided*, that any pupil who furnishes a certificate of vaccination or re-vaccination, in accordance with the rules prescribed under this act, signed by a licensed physician of this State, shall be deemed as having complied with the requirements of this act; *and provided further*, that all pupils who have had small-pox or varioloid are exempt from the operation of this act.

SEC. 3. *Be it further enacted*, That any teacher, professor, principal, or president of a public school or college of this State who permits a pupil to attend a school or college, over which he exercises control, who has not complied with the requirements of this act and with the rules made thereunder, shall be guilty of a misdemeanor and on conviction shall be fined not less than five nor more than twenty dollars for every offence.

SEC. 4. *Be it further enacted*, That it shall be the duty of the county superintendent of education of every county in this State, in advance of the opening of the sessions of the public schools and colleges of his county, to furnish the health officer of said county, and also the health officer of any incorporated town or city therein, that employs such an officer, with an estimate of the probable number of pupils that will attend the public schools and colleges within the

jurisdiction of the several health officers, as a basis upon which they shall make requisition for a supply of vaccine virus. Any county superintendent of education who shall fail or refuse to comply with this section within twenty days after the opening of the session of any public school or college within his county shall be guilty of a misdemeanor, and on conviction shall be fined not less than ten nor more than fifty dollars for every offence.

SEC. 5. *Be it further enacted*, That the county, city, and town health officers embraced in this act shall not receive any compensation, other than their regular salaries, for services rendered under this act, except that the necessary traveling expenses of the county health officer, when engaged in carrying out this act, shall be paid by the board of commissioners, or of revenue, of his county.

SEC. 6. *Be it further enacted*, That the board of commissioners, or of revenue, of every county in this state, and the city and town authorities of every incorporated city and town in this State, shall furnish free of cost to their respective health officers the vaccine virus necessary to carry into effect the provisions of this act, and shall also supply such appliances and disinfectants as may be needed for the same end.

SEC. 7. *Be it further enacted*, That it shall be unlawful for any pupil to attend a private school or college of this State who does not file with the teacher, professor, principal, or president thereof a certificate of successful vaccination, signed by a licensed physician of this State, and it shall be the duty of the health officer of the county, city, or town in whose jurisdiction such schools or colleges may be situated to examine and verify said certificates at least twice during each scholastic year, at intervals of not less than sixty days. Any teacher, professor, principal, or president of a private school or college in this State who permits a pupil to attend such school or college, over which he exercises control, who has not complied with the requirement of this section shall be guilty of a misdemeanor, and on conviction shall be fined not less than five nor more than twenty dollars: *provided*, that the requirement of this section shall not apply to such pupils as have had small-pox or varioloid.

SEC. 8. *Be it further enacted*, That the persons amenable to this act shall be exempt from the operation of any other law of this State regulating vaccination.

A BILL

To be Entitled an Act to Provide for Compulsory Vaccination when Required to Protect the People of the State Against Small-Pox.

SECTION 1. *Be it enacted by the General Assembly of Alabama*, That whenever the board of health of any county in this State, acting through its committee of public health, shall deem it necessary for

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the protection of the people of the county, or of any portion thereof, against the ravages of small-pox, or whenever instructed by the committee of public health for the State, they shall issue a proclamation requiring the vaccination and re-vaccination of the inhabitants of the county, or of any portion thereof, and also the inhabitants of any incorporated city or town in the county, within such time and under such rules as may be by them prescribed,—the issuance of the proclamation and the rules prescribed thereunder to be subject to the approval of the committee of public health for the State: *provided* that this section shall not apply to such persons as have had small-pox or varioloid, *and provided further* that if for any good and sufficient reason involving the health of any person liable under this act to vaccination or re-vaccination, the vaccinating officer shall deem it proper, he may exempt such person from being vaccinated or re-vaccinated, subject to the approval of the committee of public health for the county, and shall furnish such person with a written statement to that effect. The said vaccinating officer shall, under such rules and regulations as the committee of public health for the county may prescribe, approved by the committee of public health for the State, report to said committee of public health for the county the names of all persons vaccinated or re-vaccinated under this act, and also the names of all persons exempted from vaccination or re-vaccination, with the reasons therefor. If such exemptions be not approved by said committee of public health for the county, the persons temporarily exempted must forthwith submit to vaccination or re-vaccination, as the case may be.

SEC. 2. *Be it further enacted*, That it shall be the duty of the state board of health, on application of the committee of public health of any county in this State, under the provisions of the first section of this act, to furnish vaccine virus free of cost, in sufficient quantities, and at proper intervals, to enable said committee of public health to execute the provisions of this act: *provided*, that the health officers to whom vaccine virus is supplied under this act shall, under such rules and regulations as the state board of health shall prescribe, duly account for the use made thereof, *and provided further*, that the said board, through its executive officer, shall have the right at any time to inspect the methods employed and the records kept by any vaccinating officer, operating under this law, and to order such modifications and changes therein as to him may seem just and proper.

SEC. 3. *Be it further enacted*, That in order to carry into effect the provisions of this act it shall be the duty of the board of commissioners, or of revenue, of the county, in which proclamation has been issued as provided for in section one of this act, and also the duty of the corporate authorities of any city or town in such county affected by such proclamation, to bear their proportionate share of the total expense to be incurred in carrying out the provisions of this act.

SEC. 4. *Be it further enacted,* That any person who refuses to be vaccinated or re-vaccinated, as herein prescribed, or who interferes to prevent the vaccination or re-vaccination of any other person, shall be guilty of a misdemeanor, and on conviction shall be fined not less than ten nor more than fifty dollars.

In case the person who refuses to be vaccinated or re-vaccinated, or the one in whose behalf refusal has been made, shall have been exposed to small-pox within a period of twenty days prior to such refusal such person may be ordered by the health officer of the county, or by any one of his assistant health officers, to be isolated and guarded until the expiration of twenty days from the date of last exposure.

If any person so isolated and guarded leaves the place of detention assigned him, without permission, he shall be brought back and required to remain in detention double the length of time he would otherwise have been detained.

SEC. 5. *Be it further enacted,* That there be and is hereby, annually appropriated out of any funds in the State treasury, not otherwise appropriated, the sum of three thousand dollars, or so much thereof as may be needed, for carrying into effect the provisions of this act, said sum, or any portion thereof, to be paid out by the State Treasurer on requisition signed by the state health officer and approved by the Governor.

Other bills were introduced, but owing to the great mass of legislation before the General Assembly it proved impossible to get them through. The titles of the most important of them were as follows:

1. A BILL to provide for regulating the salaries of county health officers.

2. A BILL to amend the penal section of the law to regulate the practice of medicine.

3. A BILL to provide for chemical and microscopical examinations in the interest of the sick and afflicted people ot the State.

4. A BILL to better provide for reports of infectious diseases.

The following joint resolution was passed by both houses:

Be it resolved by the Senate, the House concurring, that the privilege be, and is hereby, granted to the "Medical Association of the State of Alabama" to have erected in the capitol building or grounds a statue, or bust, to the late Dr. Jerome Cochran, for many years the distinguished and efficient health officer of this State: provided, that the design and dimensions of said statue or bust shall be first submitted to the governor for his approval, and provided further, that said statue or bust shall be erected without cost to the State.

COUNTY SOCIETIES.

Members are reminded that upon the vitality and prosperity of the county societies depend the solidity and usefulness of this Association. Alabama is perhaps the only State in the Union that has an organized medical society in every one of its counties. No better evidence of the wisdom of our plan of organization could be furnished than this statement. Inasmuch, therefore, as the county societies are the pillars upon which rests the superstructure of this Association each member should promote in every way he can the efficiency of his home society, by attending its meetings regularly, and by seeing that it complies with all of its constitutional obligations.

In distributing the honors of this Association we believe the members would be justifiable in inquiring into the record a man makes in his home society and in weighing that record when deciding his title to honors here. Were this universally done it would not only be a safe guide in conferring the honors of this Association, but would materially aid in building up the county societies, —an object so much to be desired.

NEW EDITION OF THE BOOK OF RULES.

At the last meeting a new edition of the Book of Rules was provided for.

Owing to the disturbed condition of the country last summer, growing out of the presence of yellow fever in two or more States and the attention that had to be de-

voted to the enforcement of quarantine, it was impracticable then to edit a new edition of the book. After the excitement, caused by the presence of yellow fever in adjoining States had subsided, the meeting of the General Assembly was near at hand. Inasmuch as it was believed that additions to, and changes in, our public health laws would be made by that body, and as it was desirable that the new edition should contain any such changes or additions, it was deemed best to defer still longer its preparation and publication.

It is recommended that the authority for a new edition be continued, but that no limit of time be fixed within which it shall be published, as circumstances may render it wise to delay until another General Assembly shall convene.

Copies of the present edition, sufficient to meet all demands for sometime to come, are still on hand.

ORDINANCE IN RELATION TO THE ISSUANCE OF LICENSES.

Irregularities sometimes occur in the issuance by county boards of examiners of licenses to practice. It may be explained that when the papers of a successful applicant before a county board are sent up to the state board, a license, printed on parchment paper and in proper style, is sent out to be signed by the members of the county board and delivered to the applicant. Occasionally it happens that the members of a county board, not understanding the method just mentioned, proceed after the completion of a successful examination to write out on ordinary paper, to sign and deliver, a certificate. To prevent, in the future, this irregularity, and perhaps some other irregularities, as well, we recommend the adoption of the following ordinance:

Be it ordained by the Medical Association of the State of Alabama, That hereafter all certificates conferring the privilege of practicing medicine in this State, issued by county boards of examiners, shall be countersigned by the senior censor of the State Association before the same shall become legal and valid.

NEW CHARTERS.

Two years ago provision was made for the issuance of new charters to all of the county societies. Circumstances not necessary now to repeat prevented its accomplishment the first year. Similar circumstances have contributed to prevent it for the past year. We recommend that the authority to issue new charters be continued, with the understanding that it shall be done as soon as can be, in justice to other and urgent work.

RESOLUTIONS SUBMITTED BY DR. J. T. SEARCY.

Whereas, at the meeting of "The American Medical Association," held at Denver, in 1898, a resolution was adopted which, if carried into effect, would virtually exclude from membership a large proportion of its Southern members; and whereas, the said resolution was adopted without discussion, under a misconception of the views of "The Southern Medical College Association"; and whereas, the requirements stipulated in said resolution could not be legally carried out by the parties who would be excluded by its operation; and whereas, we do not believe "The American Medical Association" desires to exclude from membership men who have been its staunch supporters; and whereas, the elevation of the standards of medical education has always been one of the principal objects of "The Medical Association of Alabama," therefore,

Resolved, That this Association fully endorses all legitimate and practical efforts in the direction of higher medical education.

2. *Resolved*, That the imposing of a time limit which could not be carried out by the members of "The Southern Medical College Association," and also of a penalty in default of compliance therewith, was unjust, and in violation of the organic law and legal jurisdiction of the "American Medical Association."

3. *Resolved*, That this Association respectfully requests "The American Medical Association" to repeal the resolution in question, and to enact such measures only as can be complied with by "The American Medical College Association" and "The Southern Medical College Association" without violation of existing obligations to matriculated students. which obligations are enforceable by law.

4. *Resolved*, That a copy hereof be forwarded to the President and to the Secretary of "The American Medical Association," and also to the "Journal of the American Medical Association," with the request that it be published.

After thorough consideration of the above rosolutions, the Board of Censors unanimously recommend their adoption.

PREAMBLE AND RESOLUTION SUBMITTED BY DR. W. C. WHEELER.

WHEREAS; Dr. G. T. McWhorter, a Counsellor of this Association, left his home on the 17th inst. to attend this meeting, but was called back by a telegram informing him that his home had been burned, and that his wife and children had barely escaped with their lives, therefore,

Resolved, That Dr. G. T. Whorter be excused for non-attendance at this meeting, and permitted to retain his membership in the College of Counsellors on the payment of his annual dues.

Signed, W. C. WHEELER, M. D.
A. M. STOVALL, M. D.

Article 15 of the constitution prescribes the duties of counsellors, among which is the following:

That they "shall attend at least one annual session of the Association every three years."

This being a constitutional provision we report that this Association has no power to suspend or violate it, therefore we find ourselves compelled to recommend that the resolution be not adopted.

We feel sure that every member present sympathizes very deeply with Dr. McWhorter under the misfortune that prevented him from being present and have no doubt that when his name disappears from the Roll it will be restored by re-election at this meeting.

RESOLUTIONS SUBMITTED BY DR. GLENN ANDREWS.

Resolved, That the president appoint a committee of three who shall investigate the alms houses, poor houses, and jails in the different counties throughout the State and report at the next annual meeting of this Association the results of their investigation as regards the management, condition, and general conduct of these institutions.

Resolved, That not more than two hundred dollars be appropriated from the funds of this Association to defray the expense of the committee in making this investigation.

The Board of Censors readily concede that the investigation contemplated by the resolutions should be made, but they hold that it should be done by the committee of public health and health officer of each county, as now provided for by law. They feel that to send a special committee into the counties to do this work would be usurping authority already otherwise assigned, and therefore would likely be distasteful to the authorities to whom this work already belongs.

Besides, such a course would be discounting our own public health system, of which we have boasted. We believe that a vigorous effort, made at the office of the state board of health and through existing machinery, would accomplish the object. We advise that this be done. For the reasons stated, we recommend that the resolutions be not adopted.

AMENDMENT TO THE CONSTITUTION.

The board of censors recommend that Article 48 of the Constitution be so amended as to read as follows:

He shall give bond for the faithful performance of his duty, said bond to be secured by an indemnity company, selected or approved by the board of censors of this association. The amount of the bond shall be fixed by the board of censors at about double the sum of money belonging to this Association likely to be in the treasurer's hands at any one time, and said bond shall be certified and recorded in accordance with the laws of Alabama. All the funds and securities of the Association shall be placed in such banks or depositories as may be from time to time designated by the board of censors, and shall be drawn out only on orders countersigned by the president and senior censor of the Association.

All expense incurred in furnishing the bond shall be borne by the Association.

THE CUNNINGHAM RESOLUTIONS.

After mature consideration of the resolutions, offered by Dr. Cunningham at the last meeting of this Association, the board of censors submit the following views:

They believe that the stability and perpetuity of this Association depend absolutely upon the vitality and numerical strength of the county societies. Should these bodies become weakened or disintegrated, the support of this Association will be correspondingly weakened or destroyed. If the way were open for a large increase of the permanent members or counsellors of this Association, the tendency would be for many of the doctors to forfeit or abandon membership in their respective county societies and to hold membership only in the State Association. Or, if membership in the latter were made dependent upon membership in the former, as now exists, the disposition would be to lose interest in the county societies and to neglect work that membership therein now involves. The result would be that many would attach little or no importance to membership in their county societies and would satisfy their desire for professional improvement by attending one meeting of this body annually, or as would happen in many instances, by attending a meeting every two or three years. Then, the organization in many of the counties would necessarily fall to pieces, and this Association would collapse for the lack of a foundation upon which to stand.

Aside from being entrusted with important executive and legislative functions, we look upon the county medical societies as perpetual medical schools, in which the doctors may teach, and learn from, one another. This contact makes them better doctors than they would otherwise be. Grant that some of the county societies meet but seldomly; in twenty years from now, or less,

few or none of them will hold meetings less frequently than once a month, and those meetings will be attended by earnest, skillful, and interested men. In fifty years from now, or less, the immense majority of county societies will meet weekly, such meetings being greatly facilitated by good roads and improved means of transportation that will exist by that time. Think of what centres they will then become for distributing information! We can afford to wait for these fruits. All we need to know now is that we are on the right road to reap them.

To what degree is it proposed to increase the number of permanent members or counsellors? If the number were doubled or quadrupled, the immense majority of members of the county societies would still be left out. Nothing short of including them all would satisfy everybody. Were this done, as already pointed out, disintegration and death of the county societies would result. Then there would be no boards of health in the counties to administer quarantine, to collect vital statistics, to supervise the public health, to uphold the ethics of the profession, and to exercise all of the functions that now belong to county societies.

Far better keep a counsellorship in the Association as a reward for faithful service rendered as a member of a county society. The honor of such a position should act as a wholesome stimulus to laudable and persistent effort.

Many other objections than those stated might be urged against an increase of the permanent members of the Association. This is a quasi-legislative body. For the same reason that legislation can be better done through representatives sent to a General Assembly than by the people themselves, so, legislation by this body can be better done through delegates sent from

the county societies and through permanent members or counsellors than by the entire body of the profession, or by a very large and unwieldy proportion thereof. No doubt, the author of our constitution wisely and thoughtfully limited the number of counsellors to one hundred, in order to place the balance of power in the hands of the delegates representing county societies, should an issue arise that would bring about such a division; thus, upholding a great democratic principle by placing the control of this Association, in the last analysis, in the hands of the medical profession of the State, acting through delegates, and not in the hands of one hundred counsellors, however honored they may be by being so chosen.

Further, suppose there were one hundred doctors in Mobile, members of the county society, and therefore members of the State Association, with power to vote, could they not come in here to-day and control the policy and offices of this Association? Would it be wise or right to be so organized as to put such power into the hands of the local profession of any one place? Suppose there were other cities in the State with an equal or larger number of doctors, could they not reverse any previous action taken by the Association, when a meeting happened to be held in their towns? Thus, frequent changes in the organic law and policy of the Association would result. Unquestionably this kind of local influence would destroy all stability, all harmony, and all usefulness on the part of this Association.

The counsellors of this Association contribute annually to its treasury one thousand dollars. All of them must attend at least one meeting in three, and as a matter of fact many of them attend every meeting. In addition to their annual dues, they must expend considerable sums in travelling and other expenses. Are these

considerations not of some value? Do not these counsellors give to the organization a permanency and coherency it would not otherwise have?

The author and builder of our system of organization left some written words that bear directly on this subject, which we beg to quote:

A WORD OF WARNING.

The Medical Association of the State of Alabama has attained, under circumstances of very great embarrassment, a very high position of honor, efficiency and influence. The secret of her success is the unrivalled excellence of her organization, and the thoroughness of her discipline—almost like that of an army. The principal elements of her power, the throbbing heart and scheming brain that have made her great, are the College of Counsellors and the Board of Censors. If her power and prosperity are to continue these two institutions must be maintained without essential change. Two dangers confront the College of Counsellors—Counsellors always to be spelled with two ells in spite of the dictionaries. The first of these is the reduction of the annual dues; the second is the increase in the number of Counsellors composing the College.

It would be a calamity to the Association to reduce the dues. We want Counsellors who are able and willing to spend money freely in our service. Money is an element of power and we cannot have too much of it. If any change is ever made in the amount of the annual dues of the Counsellors it should be done by increasing the amount to twenty-five dollars for each one of them. The time will come when this can be done.

The number of active and paying Counsellors is now limited to one hundred. Under no circumstances and for no possible reasons, no matter how plausible they may seem, should this number ever be increased. Ambitious men will advocate the increase in order that they may have a better chance to participate in the honors of the position; and they will argue that as the number of doctors in the State increase the number of Counsellors should be increased in corresponding ratio. This argument is fallacious, and should not be allowed to influence the policy of the Association. The position is honorable now. With the lapse of time it will become incomparably more honorable. Why is a seat in the French Academy so eagerly coveted by the great men of France? Because the membership is limited to forty.

I have inserted this word of warniug here entirely on my own responsibility. I hope I will not, in consequence, be accused of presumption. I think I may claim to love the Association as no one ever

has or ever will. It may be that I shall not live long enough to edit another edition of the Book of Rules; and I have yielded to the inclination to make a record of my convictions to be read by those who may come after me.

And with this hope I subscribe myself very truly,

JEROME COCHRAN, M. D.,
Senior Censor, M. A. S. A.

Montgomery, 1889.

Could he have left a stronger or nobler vindication of his plan and shall we turn a deaf ear to his words of warning?

Without having by any means exhausted the argument, we believe we have said enough to justify us in recommending that the resolutions in question be not adopted.

THE MEMPHIS QUARANTINE CONVENTION.

In November last a quarantine convention, embracing representatives from many of the States, assembled in Memphis, Tenn.

Your State health officer, and delegates representing several commercial bodies in the State, participated.

Although the convention had evidently been called to promote the idea of greatly enlarging the quarantine powers of the marine hospital service, as shown by the invitations issued, yet the result achieved was directly the reverse of what its promoters contemplated.

As a proof of this, and as a piece of history, the resolutions adopted by the convention are herewith submitted.

MEMPHIS QUARANTINE CONVENTION.

REPORT OF COMMITTEE ON RESOLUTIONS.

The committee on resolutions, after careful consideration of the many valuable resolutions offered by the various members of the convention, have decided upon the following as embodying the ideas expressed in the majority of the said resolutions.

Therefore, that for the purpose of protecting and improving the general health of the people of the United States, co-ordinating and harmonizing the action of the State and national sanitary authorities; framing regulations for the treatment of infected vessels and materials at all infected or suspected foreign ports of shipment; preventing unnecessary interference with commerce, the United States mails, or through traffic by land or water and for adopting a uniform system of quarantine for all ports of this country; be it

Resolved, 1. That there be established on a broad and comprehensive basis a national bureau of public health in the department of the treasury of the United States; that the administration of all public health functions now exercised by authority of the United States be placed in charge of this bureau.

2. That the sanitary authorities and commercial interests of the several States of the Union be brought into immediate relations with the bureau and be given a due share in the power and responsibilities of the central board, through the agency of the advisory council, consisting of one member from each State, to be appointed by the authorities of the several States.

THE BOOK OF THE RULES ACCOUNT.

(April 1, 1898, to April 1, 1899.)

To balance on hand from last year	$ 11.32
cash for seven copies Book of the Rules at 50c	3.50
Total receipts	$ 14.82

PART II. REPORT OF THE STATE BOARD OF MEDICAL EXAMINERS.

EXAMINATIONS BY THE STATE BOARD,

For the year ending March 31, 1899.

Total number examined, ... 9.
Number granted certificates, . . 6.
Number refused certificates, . . 3.
Percentage of rejections, ... 33.33

The examinations were as follows:

Maximillion Glover, non-graduate. Certificate granted.

Nathan Litle Clarke, M. D., Louisville Medical College, 1883. Certificate granted.

Joshua Camillus Oates, M. D., University of Tennessee, 1898. Certificate granted.

Robert L. White, M. D., Medical College of Alabama, 1898. Certificate granted.

Henry Simmons Abercrombie, M. D., two Courses Chattanooga Medical College. Certificate granted.

John Harrison Blanks, M. D., University of Tennessee, 1891. Certificate granted.

Christian Zimmer Corns, two courses Montezuma Medical College, Bessemer, Ala. Certificate refused.

Robert Leon Hill, (col'd), Howard Medical College, 1897. Certificate refused.

John Van Elderen, Dental Department Louisville Hospital Medical College. Certificate refused.

EXAMINATION PAPERS ACCOUNT.

DR. W. H. SANDERS, SENIOR CENSOR, M. A. S. A.,
In account with
The State Board of Censors:

1898.	DEBITS.	
To balance on hand from last year	$	92.95
cash for 86 sets of examination papers, at $2.00 each, (less exchange on checks)		171.70
cash for 18 sets of papers, at $1.00 each, (legal cap)		18.00
cash for two certificates, $1.00 each		2.00
Total receipts	$	284.65

1898.	CREDITS.	
July 30.	By cash to Brown Printing Co., examination blanks,	$ 23.00
1899.		
Mar. 21.	cash to H. Hines for 100 tin tubes	18.00
Mar. 31.	cash to Brown Printing Co	56.50
Mar. 31.	cash loaned State Board of Health acc't	41.21
	Total expenditures	$ 138.71

RECAPITULATION.

To total receipts April 1, 1898, to April 1, 1899	$ 284.65
By total expenditures April 1, 1898, to April 1, 1899	138.71
To balance on hand'	$ 145 94

EXAMINATIONS BY THE COUNTY BOARDS,

For the year ending March 31, 1899.

Eighty-six examinations have been reported by the County Boards for the year ending March 31, 1899.

Seventy-nine of the applicants were granted licenses and seven rejected.

The rejected applicants were graduates of the following colleges:

Atlanta Medical College, 1; Georgia Eclectic, 1; Augusta (Ga.) Medical College, 1; University of Tennessee, 1; Grant University, 1; Memphis Hospital Medical College, 1; Louisville Medical College, 1.

The examinations by the various boards were as follows:

Autauga County Board.—James Wesley Jones, M. D., Medical College of Alabama, 1898. Certificate granted.

Baldwin County Board.—No examinations reported.

Barbour County Board.—James LaFayette Houston, M. D., Vanderbilt, 1898. Certificate granted.

Alexander Hamilton Culpepper, Atlanta Medical College, 1888. Certficate refused.

William Rufus McInnis, M. D., Memphis Medical College, 1896. Certificate granted.

Bibb County Board.—No examinations reported.

Blount County Board.—Frederick Eckl, M. D., New York Medical College, 1890. Certificate granted.

John Garnett Chambers, M. D., University of Nashville, 1898. Certificate granted.

Bullock County Board.—Charles Moore Franklin, M. D., College of Physicians and Surgeons, N. Y., 1898. Certificate granted.

Frank Petty Hixon, M. D., Vanderbilt, 1898. Certificate granted.

Walter Stratton Britt, M. D., Bellevue, 1898. Certificate granted.

Butler County Board.—James Crawford Watson, M. D., Medical College of Alabama, 1898. Certificate granted.

Charles E. Heartsill, M. D., Tulane, 1893. Certificate granted.

Calhoun County Board—James Allison Edmondson, M. D., Atlanta Medical College, 1898. Certificate granted.

Chambers County Board.—John Permenus Liles, M. D., Birmingham Medical College, 1896. Certificate granted.

Samuel Harris Newman, M. D., Memphis Hospital Medical College, 1898. Certificate granted.

Chilton County Board.—No examinations reported.

Cherokee County Board.—Johnnie Carter Cunningham, Grant University (Chattanooga, Tenn.) Certificate refused.

Luther Wright, M. D., Southern Medical College, 1898. Certificate granted.

Choctaw County Board.—David Luke Gavin, M. D., Louisville Medical College, 1898. Certificate granted.

John H. Hendrix, Memphis Hospital Medical College, 1897. Certificate refused.

Samuel S. Alman, Louisville Medical College, 1898. Certificate refused.

Clarke County Board.—No examinations reported.

Clay County Board.—No examinations reported.

Cleburne County Board.—William Henry Price, M. D., University of Tennessee, 1890. Certificate granted.

Simon Lovell Bearce Blacke, M. D., Medical College of Ohio, Cincinnati, 1869. Certificate granted.

Wesley Hollingsworth Crumpton, M. D., Chattanooga Medical College, 1897. Certificate granted.

Coffee County Board.—Nelson Matthews Ham, M. D., Medical College of Alabama, 1898. Certificate granted.

Colbert County Board—No examinations reported.

Conecuh County Board—John Nelson Mixon, M. D., Kentucky School of Medicine, 1898. Certificate granted.

Coosa County Board.—John Walter Grimes, M. D., Sewanee, Tenn., 1899. Certificate granted.

Covington County Board.—No examinations reported.

Crenshaw County Board.—Frank Reid Yarbrough, M. D., University of Tennessee, 1898. Certificate granted.

Cullman County Board.—No examinations reported.

Dale County Board.—William Daniel Mixson, M. D, Chattanooga Medical College, 1898, Certificate granted.

Dallas County Board.—Daniel B. Edwards, Medical College of Alabama, 1898. Certificate granted.

DeKalb County Board.—Isaac William Howard, M. D., Memphis Hospital Medical College, 1898. Certificate granted.

Elmore County Board.—No examinations reported.

Escambia County Board.—No examinations reported.

Etowah County Board.—Herschel Virgil Baskin, M. D., Medical College of Alabama, 1898. Certificate granted.

Fayette County Board.—Willis Marion Mackey, M. D., Memphis Hospital Medical College, 1897. Certificate granted.

John Franklin Randolph, M. D., Memphis Hospital Medical College, 1897. Certificate granted.

Franklin County Board.—William Porter Hughes, M. D., Kentucky School of Medicine, 1896. Certificate granted.

Paul Ray Jones, M. D., Vanderbilt, 1898. Certificate granted.

Geneva County Board.—James Henry Holly, M. D., Medical College of Alabama, 1898. Certificate granted.

George Hamilton Herring, Georgia Eclectic Medical College, 1898. Certificate refused.

Greene County Board—No examinations reported.

Hale County Board.—No examinations reported.

Henry County Board.—No examinations reported.

Jackson County Board.—William Cornelius Leary, Augusta Medical College, 1893. Certificate refused.

Walter Rosser, M. D., Vanderbilt, 1898. Certificate granted.

Jefferson County Board—James Edwin Dedman, M. D., University of Tennessee, 1890. College of Physicians and Surgeons, N. Y., 1891. Certificate granted.

Nathaniel Guido Clark, M. D., Birmingham Medical College, 1898. Certificate granted.

John Harrison Blanks, University of Tennessee, 1891. Certificate refused.

Dicia Houston Baker, M. D., "Louvra Memorial Woman's of Cincinnati," Ohio, 1898. Certificate granted.

Edgar Allen Jones, M. D., Birmingham Medical College, 1898. Certificate granted.

George W. Mosby, M. D., Howard University, 1888. Certificate granted.

Lamar County Board.—Clarence Love Woods, M. D., Memphis Hospital Medical College, 1898. Certificate granted.

Judge Crayton Buchelew, M. D., Chattanooga Medical College, 1898. Certificate granted.

John Kent Lindsey, M. D., Memphis Hospital Medical College, 1898. Certificate granted.

Lauderdale County Board.—No examinations reported.

Lawrence County Board.—Marion Madison Norton, M. D., Chattanoog Medical College, 1898. Certificate granted.

James Robert Roberson, M. D., Medical College of Alabama, 1898. Certificate granted.

Albert Sidney Zimmerman, M. D , Sewanee Medical College, 1897. Certificate granted.

Lee County Board.—No examinations reported.

Limestone County Board—No examinations reported.

Lowndes County Board.—Norman Gilchrist James, M. D., Medical College of Alabama, 1898. Certificate granted.

Frank Shackelford, M. D., Medical College of Alabama, 1898. Certificate granted.

Middleton Howard Hagood, M. D., Medical Collega of Alabama, 1898. Certificate granted.

John Walter Hagood, M. D , Medical College of Alabama, 1898. Certificate Granted.

Macon County Board.—No examinations reported.

Madison County Board.- Edwin Oliver Williamson, M. D., Grant University, 1898. Certificate granted.

John W. Feeney M. D , (College and date of graduation not given.) Certificate granted.

Felix Henry Compton, M. D., Vanderbilt, 1883. Certificate granted.

Marengo County Board.—Eugene Clarke Goodloe, M. D., Vanderbilt, 1897. Certificate granted.

Solen L. Coleman, M. D., Tulane, 1898. Certificate granted.

John Samuel Skinner, M. D., Medical College of Alabama. Certificate granted.

A. Lee Barron, M. D., Memphis Hospital Medical College, 1898. Certificate granted.

Marshall County Board.—William Thomas Gillespie, M. D., Chattanooga Medical College, 1898. Certificate granted.

John Randolph Sherman, M. D., Chattanooga Medical College, 1897. Certificate granted.

George Volney Bush, M. D., Southern Medical College, 1890. Certificate granted.

Mobile County Board.—William Thomas Hendon, M. D., Medical College of Alabama, 1898. Certificate granted.

Robert Eugene Shaw, M. D., Medical College of Alabama, 1898. Certificate granted.

William Henry Gee, M. D., Medical College of Alabama, 1898. Certificate granted.

Llewellyn Ludwig Duggar, M. D., Medical College of Alabama, 1898 Certificate granted.

James Gray Thomas, M. D., Medical College of Alabama, 1898. Certificate granted.

Monroe County Board.—No examinations reported.

Montgomery County Board.—No examinations reported.

Morgan County Board—Frank Emens, M. D., Louisville Medical College, 1898. Certificate granted.

Perry County Board.—Charley Walter Wilkerson, M. D., Tulane, 1898. Certificate granted.

Pickens County Board.—Arthur Albertus Kirk, M. D., Medical College of Alabama, 1897. Certificate granted. (Examination held in 1897. Papers not sent up until 1898.)

Ephriam Alexander Snoddy, M. D., Medical College of Alabama, 1897. Certificate granted. (Examination held in 1897. Papers not sent up until 1898.)

Pike County Board.—T. Knox Mullens, M. D., (no data). Certificate granted.

Joseph Franklin Siler, M. D., University of Virginia, 1898. Certificate granted.

Randolph County Board.—James Ratchford Taylor, M. D., Atlanta Medical College, 1898. Certificate granted.

Columbus Bartow Wright, M. D., Medical College of Alabama, 1898. Certificate granted.

Russell County Board.—Robert Clarke Prather, M. D., Medical College of Alabama, 1898. Certificate granted.

John Paschal, M. D., Atlanta Medical College, 1898. Certificate granted.

William Thomas Glass, M. D., Barnes Medical College, St. Louis, Mo. Certificate granted.

A. R. Allen, M. D., (no data). Certificate granted.

St. Clair County Board.—Jackson Tucker Brown, M. D., Birmingham Medical College, 1897. Certificate granted.

Shelby County Board.—Edwin Columbus Bandy, M. D., Montezuma Medical College, (Bessemer, Ala.), 1898. Certificate granted.

Rufus Coons Jones, M. D., Montezuma Medical College, (Bessemer, Ala.), 1898. Certificate granted.

Sumter County Board.—John Perkins Scales, M. D., Louisville Medical College, 1897. Certificate granted.

Talladega County Board.—No examinations reported.

Tallapoosa County Board.—No examinations reported.

Tuscaloosa County Board.—George Augustus Weaver, M. D., Howard University, 1898. Certificate granted.

Walker County Board.—No examinations reported.

Washington County Board.—No examinations reported.

Wilcox County Board.—No examinations reported.

Winston County Board.—No examinations reported.

PART III—REPORT OF THE STATE COMMITTEE OF PUBLIC HEALTH.

Since our last report small-pox has continued to prevail and is still prevailing in this State.

In some counties vigorous efforts of extermination have been enforced and have been followed by success; whilst in other counties little or nothing has been done, consequently in these the disease has been permitted to run its own course. Manifestly it is unjust for those counties that do all that is necessary for the extermination of the disease to be continually reinfected from counties that do nothing, yet this is the case.

One of the vaccination bills (No. 2) introduced into the last General Assembly, a copy of which appears in part 1 of this report, was intended to prevent this injustice, but, as already stated, it failed to become a law. Unquestionably, if the authorities in every county would institute vigorous measures for the extermination of small-pox it could be accomplished in two months, more or less, but so long as some counties fail to employ any measures whatever the disease will remain with us.

We are of the opinion, however, that the blame for non-action in counties that take no steps frequently lies at the door of the boards of health of such counties.

When an infectious disease makes its appearance in a county it becomes the business of the committee of public health and of the health officer of such county to investigate the nature thereof, and to recommend to the county, city, or town officials, as the case may be, the steps that should be taken to prevent the spread of, and to exterminate, said disease. Such recommendations should be accompanied by an estimate of the probable cost of carrying them into execution. To save misunderstandings these recommendations and estimates should be put in writing and sent to the authorities of

the county, city, or town. Not only should this be done, but if the authorities should appear reluctant to appropriate the necessary funds, the committee of public health and health officer should urge the appropriation by argument and personal appeal.

When the necessary funds have been appropriated it becomes the duty of the committee of public health and the health officer to supervise and direct the measures employed, using the utmost care to see that the money is judiciously and economically expended.

We are persuaded that many boards of health and health officers do not sufficiently insist upon their right to direct and supervise the means employed. They are disposed to leave the execution of the measures of control to the authorities of the county, city, or town, as the case may be, whereas under our system this distinctly belongs to the committee of public health and the health officer, acting for the county board of health.

'Power cleaves to him who power exerts' was a favorite sentiment of the founder and builder of our system, and no better application of the converse of this sentiment need be looked for than the surrender of the power referred to.

Unless the committees of public health and the health officers demand and execute their rights in this respect they will certainly lose them.

Although our present laws need to be amended, yet if the health authorities would only use the power that now belongs to them, they could eradicate small-pox from the State.

This Board urges that one simultaneous and earnest effort be made by all counties in which small-pox exists, to exterminate the disease, feeling sure that it would be followed by success.

We are glad to be able to report that the State escaped any visitation from yellow fever during the last summer, although the disease came within a few miles of our western border at three different places. Our protection was due to the timely establishment and vigorous enforcement of quarantine.

Fewer local quarantines within the State were conducted than during the previous year, reliance being generally placed by the local authorities on the quarantine instituted by the State. Every effort was made to administer the State quarantine as economically as possible, and when the statement is made that the total expense amounted to not more than $3,600.00 it will be seen that Alabama purchased her protection at a remarkably low price, far below, it is believed, the amounts expended by other endangered or invaded States.

During the summer and fall it became necessary for the state health officer to visit a number of places outside of the State for the purpose of investigating rumors as to the existence of yellow fever. The places thus visited were: Pensacola, Tampa and Jacksonville, Fla.; the towns on the Mississippi coast on several occasions, and Columbus, in the same State; and on two occasions, New Orleans.

These visits of inspection are believed to be of very great importance and utility. They serve the double purpose of enabling the health officials of States directly concerned to arrive at a definite knowledge of the presence or not of real danger, and therefore furnish them with a basis for intelligent action. Frequently unfounded rumors are exposed, and thus apprehension and excitement are allayed. In a word, the object of these visits is to promptly arrive at the truth and to boldly proclaim it.

It is earnestly recommended by this board that such an agreement be entered into by the health officials of

the South Atlantic and Gulf States as will facilitate and promote an interchange of visits of inspection of their respective exposed places at frequent intervals during seasons of danger.

Should any necessity arise hereafter for the establishment of internal quarantine, we are of the opinion that under our new law on the subject it can be conducted with far greater ease and harmony than heretofore.

This law so defines the quarantine rights belonging to the State and counties, and the municipalities, respectively, as to leave no ground for doubt or conflict.

FINANCIAL STATEMENT.

THE STATE BOARD OF HEALTH,

In account with *The State of Alabama:*

1898.	DEBITS.	
April 1.	To balance on hand from last year.....	$ 106 16
April 30.	To cash from Treasurer.....	250.00
May 31.	" " "	250 00
June 30.	" " "	250.00
July 31.	" " "	250.00
Aug. 31.	" " "	250.00
Sept. 30.	" " "	250.00
Oct. 31.	" " "	250.00
Nov. 30.	" " "	250.00
Dec. 31.	" " "	250.00
1899.		
Jan'y 31.	" " "	250.00
Feb. 28.	" " "	250.00
M'ch 31.	" " "	250.00
	To total receipts.....	$ 3,106.16

1898.	CREDITS.	
April 14.	By cash for postage.....	$ 10.00
25.	clerk's expenses to Birmingham to attend meeting of State Association.....	3.00
25.	W. L. Chambliss for services in office.....	4.00

	25.	Geo. D. Barnard & Co. for stationery.....	14 00
	25.	expressage on papers from Birmingham.....	.50
	30.	clerk's salary for April.....	41.65
	30.	state health officer's salary for April	150.00
May	4.	cash for postage.....	10.00
	4.	cash to Postal Telegraph Co	1.17
	4.	cash to Western Union Telegraph Co.....	.50
	18.	cash for postage.....	10.00
	31.	cash to Ellis & Gay for office desk and chair.	28.00
	31.	clerk's salary for May.....	41.65
	31.	health officer's salary for May	150.00
June	3-13.	health officer's expenses to Denver, Col., to attend meeting American Medical Association.....	38.85
	10.	cash for postage.....	10.00
	13-14.	health officer's expenses to Mississippi Coast to investigate yellow fever	6.85
	17.	cash for 2,000 stamped envelopes.....	43.60
	30.	health officer's expenses to Mississippi Coast (second trip)	1.50
	30.	health officer's salary for June.....	150.00
	30.	clerk's salary for June	41.65
July	2.	cash for postage.....	10.00
	3.	P. O. Box rent.....	1 50
	6-9.	health officer's expenses to New Orleans (yellow fever).....	3.40
	23.	cash to Elzear Pellitier for annual dues to conference state and provincial boards of health for 1897.....	15.10
	25.	cash to Western Un. Telegraph Co. (Mobile)	.89
	29.	cash to Postal Telegraph Co. (Mobile)	11.39
	30.	cash to Brown Printing Co.....	53.00
	31.	health officer's salary for July	150.00
	31.	clerk's salary for July.....	41 65
Aug.	1.	cash to E. C. Fowler & Co. (stationery)	3.55
	1.	cash to Western Union Telegraph Co.....	2.85
	1.	cash for postage.....	10.00
	3.	cash to P. J. Loughran (disconnecting radiator in office).....	.75
	12.	cash to Postal Telegraph Co.....	7.31
	29.	cash for postage.....	10.00
	31.	health officer's salary for August.....	150.00
	31.	clerk's salary for August.....	41.65
	31.	telegram from Dr. Souchon, President Louisiana Board of Health	.70
	30.	telegram to Dr. Abernathy, (Flomaton) paid by Dr. Sanders.....	.25

Sept.	6.	health officer's expenses to New Orleans (yellow fever)	4.05
	12-13.	health officer's expenses to Meridian and York (yellow fever)	5.00
	15-16.	health officer's expenses to Pensacola (yellow fever)	4.40
	21.	cash for postage	10.00
	24-28.	health officer's expenses to Tampa, Fla., (yellow fever)	42.24
	29.	health officer's expenses to Gulf Coast (yellow fever)	2.00
	30.	health officer's salary for September	150.00
	30.	clerk's salary for September	41.65
Oct.	3-8.	health officer's expenses to Jacksonville, Fla. (yellow fever)	17.79
	11-15.	health officer's expenses to York, Ala., and Columbus, Miss	9.90
	15.	cash for postage	10.00
	15.	cash for box rent	1.50
	17-21.	health officer's expenses to Huntsville and Birmingham	11.30
	31.	health officer's expenses to Calera, Birmingham and Cullman	8.50
	31.	health officer's salary for October	150.00
	31.	clerk's salary for October	41.65
Nov.	1.	expressage on stationery from St. Louis	1.10
	4.	expressage on package from New Orleans	.55
	6-8.	health officer's expenses to Washington and Dallas counties (small-pox)	8.90
1898.			
Nov.	16.	cash for postage	$ 10 00
	25.	expressage on package from Memphis	60
	30.	health officer's salary for November	150 00
	30.	clerk's salary for November	41 65
Dec.	23.	cash for postage	10 00
	31.	health officer's salary for December	150 00
	31.	clerk's salary for December	41 65
1899.			
Jan.	4.	cash to Postal Telegraph Co	2 29
	12.	cash for 500 stamped (1c.) envelopes	5 60
	13.	cash for postage (sending out annual blanks)	15 00
	17.	expressage on package from Mobile	50
	19.	expressage on package from Mobile	65
	20.	P. O. box rent	1 50

	25.	cash for postage (for sending out small-pox circulars	10 00
	26.	cash to Graham & Delchamps, printers, for 2,500 small-pox circulars, etc	15 25
	26.	cash to L. E. Brooks, Esq., Mobile, Ala , for legal services	25 00
	27.	"due" postage	35
	30.	cash to Western Union Tel. Co. (Birmingham)	3 70
	31.	health officer's salary for January	150 00
	31.	clerk's salary for January	41 65
Feb.	1.	cash to Western Union Telegraph Co	1 21
	2.	cash to E. C. Fowler & Co., for stationery, etc.	8 30
	2.	cash to Geo. D. Barnard & Co., St. Louis, Mo., for 3,000 letter heads, lithographed	21 45
	2.	cash for 500 stamped (1c) envelopes	5 60
	2.	one check book	25
	18.	cash for postage	10 00
	28.	health officer's salary for February	150 00
	28.	clerk's salary for February	41 65
Mar.	1.	cash for telephone message to Cullman (small-pox)	90
	9.	cash for 1,000 stamped (2c.) envelopes	21 20
	9.	cash for postage	15 00
	9-14	health officer's expenses Cullman, Jefferson, Dallas, etc	12 50
	16.	cash for post office key	20
	26-27	health officer's expenses to Russell and Bullock counties (small-pox)	4 48
	27.	cash to Elzear Pellitier, for annual dues to conference state and provisional boards of health for 1898	15 10
	27.	cash to Dr. H. A. Moody, president M. A. S. A., for extra expenses incurred in traveling in interest of state board of health during term of office	30 30
	30.	cash for drayage	25
	31.	health officer's salary for March	150 00
	31.	clerk's salary for March	41 65
		cash for 200 copies of printed proceedings of the conference of representatives from the Louisiana, Mississippi and Alabama boards of health, held at Ocean Springs, Miss., September 4, 5 and 6, 1897	10 00
	31.	cash to Brown Printing Co.	145 50
		Total expenditnres	$3,147 37

RECAPITULATION.

By total expenditures April 1, 1898, to April 1, 1899.....	$3,147 37
To total receipts April 1, 1898, to April 1, 1899.....	3,106 16
By balance due examination papers account...	$ 41 21

THE COLLECTION OF VITAL AND MORTUARY STATISTICS.

THE WORK OF THE COUNTY BOARDS.

The work of collecting the vital and mortuary statistics of the state, notwithstanding many obstacles, still continues with some degree of improvement. More counties are now actively engaged in the work than for a number of years past. Several, that for a long period have sent no reports at all and have done practically nothing, have, during the past year, re-organized and are now doing fairly good work,—*i. e.* sending up reports regularly every month and otherwise giving evidence of renewed interest and vitality.

Our failure to have enacted into law by the last General Assembly a bill providing for regulating the salaries of county health officers was a great disappointment, and also a great drawback to the work, as in many of the counties no salary at all is appropriated for the county health officer, whilst in others the amount is so small as to make it ridiculous and insignificant,—such as ten dollars in some and fifteen in others. Naturally, perfect work cannot be expected from these counties.

Strong efforts were made to secure the legislation mentioned, but owing to certain circumstances, which we cannot here explain, the bill was lost. We intend, however, to continue the fight vigorously and earnestly, and hope for better success at the hands of the next legislature.

The work of the various counties might be summed up under the following classes:

1. Counties that for the past year have done perfect, or nearly perfect, work.

2. Counties that are doing fairly good work.

3. Counties in which the work is very imperfectly done.

4. Counties that are doing practically nothing.

In the first class are the counties of Baldwin, Bullock, Clay, Conecuh, DeKalb, Escambia, Fayette, Jefferson, Jackson, Mobile, St. Clair.

Second class: Autauga, Barbour, Bibb, Butler, Clarke, Coosa, Crenshaw, Dallas, Etowah, Hale, Lawrence, Montgomery, Morgan, Pike, Randolph, Sumter, Talladega, Tallapoosa, Shelby, Tuscaloosa, Winston.

Third class: Blount, Cherokee, Choctaw, Cleburne, Coffee, Cullman, Elmore, Geneva, Henry, Lamar, Madison, Monroe.

Fourth class: Calhoun, Chambers, Chilton, Colbert, Covington, Dale, Franklin, Greene, Lauderdale, Lee, Limestone, Lowndes, Macon, Marengo, Marion, Marshall, Perry, Pickens, Russell, Walker, Washington, Wilcox.

ACTION OF THE ASSOCIATION ON THE ABOVE REPORT.

THE PRESIDENT'S MESSAGE.

The first recommendation of the president (see p. 88) was, upon the advice of the board of censors, not concurred in.

The second recommendation of the president (see p. 88) was concurred in, and the Ordinance drawn up by

the board of censors to carry the recommendation into effect, was adopted.

The views expressed by the president and the comments thereon by the board of censors, as to the bad effects of the injection of "political methods" into the elections of the Association (see p. 89 and following) were unanimously adopted.

The several recommendations of the board of censors as to the reports of the vice presidents, the report of the secretary and the Book of the Rolls, the report of the committee of publication, the report of the treasurer and the book of accounts, and the accounts of the state health officer (see pp. 91 and 92) were adopted.

The views and recommendations of the board of censors as to the revision of the minutes of 1898 (see p. 92) were adopted.

The action of the board of censors as to the delinquent county societies was endorsed.

Notice of the enactment by the last General Assembly of a quarantine law (see p. 93) was accepted, and the recommendation of the board of censors that the members of the Association generally, and especially the members of the committees of public health of the several counties, will familiarize themselves with the law by reading it carefully, was approved.

Information as to other bills introduced into the General Assembly, and which failed to become laws, was submitted in the report, but being unaccompanied by any recommendation, no action thereon was necessary.

Notice of the passage by the last General Assembly of a Joint Resolution providing for the erection in the Capitol building or grounds of a statue or bust to Dr. Cochran, (see p. 102) was accepted by the Association.

Certain suggestions of the board of censors as to some

of the ways of promoting the interests of the county societies (see p. 102) were endorsed.

The recommendation as to the publication of a new edition of the Book of the Rules (see p. 102) was approved.

The ordinance submitted in regard to the issuance of licenses to practice medicine by county boards of examiners (see p. 104) was unanimously adopted.

The recommendation as to the issuance of new charters to the county societies (see p. 104) was approved.

The recommendation that the preamble and resolutions offered by Dr. Searcy, (see p. 104) be endorsed was unanimously adopted.

The recommendation in regard to a resolution submitted by Dr. Wheeler, and signed by Drs. Wheeler and Stovall (see p. 105), was adopted.

The views expressed and recommendation made in regard to certain resolutions introduced by Dr. Andrews (see p. 105) were adopted.

The amendment to the Constitution proposed by the board of censors (see p. 106) was ordered to lie over to the next meeting of the Association.

The views expressed and recommendation made in regard to certain resolutions offered by Dr. Cunningham at the last meeting of the Association (1898) were unanimously adopted.

The copy of the resolutions adopted by a "Quarantine Convention," held in Memphis, Tenn., was accepted as information.

The Book of the Rules account, as submitted, was approved.

The report of the board of censors, acting as a State board of medical examiners, was submitted without being read, and was approved by a formal vote.

The report of the board of censors, acting as a committee of public health for the State, was also submitted without being read, and was approved by a formal vote.

The report was then adopted as a whole, with the understanding that the proposed amendment to the Constitution shall lie over to the next meeting of the Association for such action thereon as may be taken.

THE REVISION OF THE BOOK OF THE ROLLS.

(1.) THE ROLL OF THE COUNTY SOCIETIES.

The Committee on the revision of the Rolls, composed of the senior censor, the secretary, and the treasurer, reported three schedules of county societies, as follows:

(1.) *Societies Not Delinquent.*

That is to say, societies with all of their constitutional obligations fulfilled—delegates in attendance, reports made, and dues paid:

Autauga, Barbour, Bullock, Butler, Calhoun, Clarke, Cleburne, Colbert, Conecuh, Cullman, Dallas, Elmore, Escambia, Fayette, Geneva, Hale, Jefferson, Lamar, Madison, Marengo, Marion, Marshall, Mobile, Monroe, Montgomery, Morgan, Perry, Pickens, Pike, Randolph, St. Clair, Shelby, Sumter, Talladega, Tallapoosa, Tuscaloosa, Walker, Washington, Winston. Total 39.

No objection being made to the correctness of this schedule, the president ordered these thirty-nine societies to be passed as clear of the books.

(2.) *Societies Partially Delinquent.*

Baldwin, delinquent in dues.

Bibb, delinquent in dues.

Blount, delinquent in delegates and report.

Cherokee, delinquent in dues.
Chilton, delinquent in dues and report.
Choctaw, delinquent in delegates.
Clay, delinquent in report.
Coffee, delinquent in dues.
Coosa, delinquent in dues.
Crenshaw, delinquent in delegates.
Dale, delinquent in delegates.
DeKalb, delinquent in dues and delegates.
Etowah, delinquent in dues.
Franklin, delinquent in dues and delegates.
Henry, delinquent in report.
Jackson, delinquent in report.
Lauderdale, delinquent in dues and delegates.
Lawrence, delinquent in dues and delegates.
Lee, delinquent in dues and delegates.
Limestone, delinquent in dues and delegates.
Lowndes, delinquent in delegates.
Total, 21.

No objection being made to this schedule, the president ordered these twenty-one societies to be passed, with the understanding that the secretary and the treasurer would look after the missing reports and dues.

(3.) *Delinquent Societies.*

That is to say, societies delinquent in all of their constitutional obligations—delegates, dues and reports:

Chambers, Covington, Greene, Macon, Russell, Wilcox. Total 6.

No objection being made to the correctness of this schedule, the president ordered these six societies to be referred to the board of censors for investigation.

The revision of the first roll, the roll of the county societies, was here ended, the said roll to stand closed until the next annual session of the Association.

(2.) THE ROLL OF THE COLLEGE OF COUNSELLORS.

The Committee on the Revision of the Rolls reported the seven schedules of the counsellors as follows:

(1.) *Counsellors Clear of the Books.*

Grand Seniors.—Baldwin, Benjamin James; Bragg, Shirley; Brockway, Dudley Samuel; Cason, Davis Elmore; Fletcher, Richard Matthew; Franklin, Charles Higgs; Gaines, Vivian Pendleton; Goggans, James Adrian; Goodwyn, Joseph Anderson; Harlan, John Jefferson; Hayes, Robert Hughes; Hill, Luther Leonidas; Huggins, Jacob; Inge, Henry Tutwiler; Jay, Andrew; Jones, Capers Capehart; Kendrick, Joel Cloud; Lowry, Samuel Hickman; Nolen, Abner Jackson; Redden, Robert James; Robertson, Thaddeus Lindley; Searcy, James Thomas; Sholl, Edward Henry; Sledge, William Henry; Stovall, Andrew McAdams; Thetford, William Fletcher; Thomas, James Grey; Trent, Powhatan Green; Whaley, Lewis; Wheeler, William Camp; Wilkerson, Wooten Moore. Total number, 31.

Seniors.—Andrews, Glenn; Blake, Wyatt Heflin; Cameron, Matthew Bunyan; Coley, Andrew Jackson; Cunningham, Russell McWhorter; DeWeese, Thomas Peters; Duggar, Reuben Henry; Gay, Samuel Gilbert; Goode, Rhett; Heacock, John William; Heflin, Wyatt; Hunter, Henry Mitchell; King, Goldsby; LeGrand, John Clark; Maréchal, Edwin Lesley; McCants, Robert Beall; Moon, William Henry; Parke, Thomas Duke; Watkins, Isaac LaFayette; Whitfield Bryan Watkins; Wilkerson, Charles A.; Wilkinson, John Edward. Total number, 22.

Juniors.—Bell, Walter Howard; Bondurant, Éugene DuBose; Brannon, Henry Lee; Brown, George Summers; Davis, William Elias Brownlee; Desprez, Louis Willoughby, Dixon, John; Frazer, Tucker Henderson; Goodman, Duke William; Graham, William Alexander; Harrison, William Groce; Harper, Robert Franklin; Hill, George Armstrong; Howle, James Augustus; Johnston, Lewis William; Jones, Julius; Jones, Edward Spears; McEachern, John Adolphus; McLaughlin, James Madison; Moody, Fleming Isaac; Moody, Henry Altamont; Perry, Henry Gaither; Quin, William Everett; Riggs, Edward Powell; Robinson, Thomas Franklin; Sutton, Robert Lee; Swann, Joseph Charles; Waller, George Platt; Whitfield, James Bryan; Williams, John Harford; Wyman, Benjamin Leon. Total number, 31.

No objection being made to the correctness of this schedule, the president ordered that the counsellors, eighty-four in number, whose names had been read, should be duly passed as clear of the books.

(2) *Delinquent Counsellors.*

COUNSELLORS DELINQUENT IN DUES.

Hamilton William Thomas, (Junior, 1895,) Ironaton.

McWhorter, Horace Puckett, (Junior, 1895,) Collinsville.

Murray, Michael William, (Junior, 1895,) New Decatur.

DELINQUENT IN ATTENDANCE.

McWhorter, George Tilghman, (Junior, 1896,) Riverton.

Total, 4.

No objection being made to the correctness of this schedule, the president, under the rules, ordered that the counsellors, four in number, whose names had been read as delinquents, should be stricken from the roll of the college of counsellors, and that of this action they should be duly notified by the secretary.

(3.) *Miscellaneous Counsellors.*

COUNSELLORS WHO RESIGNED.

Wilkinson, James Anthony, Grand Senior Counsellor, 1886, Montgomery.

Robinson, Christopher Americus, Senior Counsellor, 1890, Huntsville.

COUNSELLOR NOT MEMBER OF COUNTY SOCIETY.

Carson, Shelby Chadwick, Senior Counsellor, 1893, Greensboro.

Total, 3.

No objection being made to the correctness of this schedule, the president, under the rules, ordered that these names be stricken from the roll of the college of counsellors.

(4.) *Grand Senior Counsellor of Ten Years Standing.*

Gaines, Vivian Pendleton, Mobile.

Total 1.

No objection being made to the correctness of this schedule, the president, under the rules, ordered that the counsellor whose name had been read as having served ten consecutive years as grand senior counsellor should be transferred to the roll of grand senior life counsellors, and that of this transfer he should be duly notified by the secretary.

(5.) *Senior Counsellors of Five Years Standing.*

Goode, Rhett, Mobile.

LeGrand, John Clark, Birmingham.

Marechal, Edwin Lesley, Mobile.

Total, 3.

No objection being made to the correctness of this schedule, the president, under the rules, ordered that the counsellors, three in number, whose names had been read as having served for five consecutive years as senior counsellors, should be transferred to the roll of grand

senior counsellors, and that of this transfer they should be duly notified by the secretary.

(6.) *Junior Counsellors of Five Years Standing.*

Bell, Walter Howard, Oxford.
Bondurant, Eugene DuBose, Mobile.
Brown, George Summers, Birmingham.
Harper, Robert Franklin, Ozark.
Hill, George Armstrong, Wynette.
McLaughlin, James Madison, Springville.
Moody, Henry Altamont, Bailey Springs.
Perry, Henry Gaither, Greenville.
Quin, William Everett, Fort Payne.
Riggs, Edward Powell, Birmingham.
Williams, John Harford, Columbiana.
Total, 11.

No objection being made to the correctness of this schedule, the president, under the rules, ordered that the counsellors, eleven in number, whose names had been read as having served for five consecutive years as junior counsellors, should be transferred to the roll of senior counsellors, and that of this transfer they should be duly notified by the secretary.

(7.) *Counsellors Elect.*

Bennett, Benjamin Franklin, Clayton.
Dryer, Thomas Edmund, Huntsville.
Harlan, Aaron LaFayette, Alexander City.
Henley, Albert Thomas, Birmingham.
Hill, Robert Sommerville, Montgomery.
McCain, William Jasper, Livingston.
Pearson, Benjamin Rush, Montgomery.
Sims, Albert Gallatin, Renfroe.
Total, 8.

No objection being made to the correctness of this schedule, the president, under the rules, ordered that

the counsellors elect, eight in number, whose names had been read as having signed the counsellor's pledge and paid their dues, be transferred to the roll of the junior counsellers, and that of this transfer they should be duly notified by the secretary.

The revision of the second roll, the roll of the college of counsellors, was here ended, the said roll to stand closed until the next annual session of the Association.

(3.) THE ROLL OF THE CORRESPONDENTS

Bozeman, Nathan, M. D., New York, 1889.

Garnett, A. F., M. D., Hot Springs, Ark., 1875.

Hoffman, John Richardson, M. D., Athens, Ala., 1890.

Mitchell, William Augustus, M. D., Eufaula, Ala., 1891.

Moses, Gratz A., M. D., St. Louis, Mo., 1874.

Osborn, Thomas Childress, M. D., Cleburne, Texas, 1885.

Peavy, Julius Franklin, M. D. Ashville, N. C., 1899.

Rorex, James Polk, M. D., Scottsboro, Ala., 1891.

Summers, Thomas O., M. D., St. Louis, Mo., 1875.

The revision of the third roll, the roll of the correspondents, was here ended, the said roll to stand closed until the next annual session of the Association.

DIED DURING THE YEAR.

McDaniel, Edward Davies, M. D., Camden, Ala.

No objection being made to the correctness of this schedule, the president, under the rules, ordered that the name be stricken from the roll of Correspondents.

(4.) THE ROLL OF THE OFFICERS.

The Committee on the Revision of the Rolls reported the following vacancies in the roll of the officers:

One president for one year.

One vice-president for the southern division for two years.

Two censors for five years to fill vacancies caused by the expiration of the terms of Dr. J. B. Gaston and Dr. E. H. Sholl.

One orator.

One alternate orator.

The president then declared elections to fill the vacancies reported in order, and appointed the following tellers to take the ballot and count it: Drs. W. C. Wheeler, H. T. Inge, and J. A. Howle.

The result of the several ballots taken was the election of the following officers:

President—Dr. J. C. LeGrand, Birmingham.

Junior Vice-President—Dr. S. G. Gay, Selma.

Censors for five years—Dr. E. H. Sholl, Birmingham, and Dr. G. Andrews, Montgomery.

Orator—Dr. Rhett Goode, Mobile.

Alternate Orator—Dr. T. H. Frazer, Mobile.

The revision of the fourth roll, the roll of the officers, was here ended, the said roll to stand closed until the next annual session of the Association.

The Election of Counsellors.

The Committee on the Revision of the Rolls reported that there were nine vacancies in the college of counsellors, whereupon the president ordered that a ballot be taken, which resulted in the election of the gentlemen whose names are appended.

Bancroft, J. D., Sumterville.
Blair, H. W., Sheffield.
Gaston, J. L., Montgomery.
Guice, C. L., Harris.
Henderson, S. C., Brewton.
Justice, O. S., Central.
Pride, W. T., Madison.
Warren, B. S., Clayton.
Welch, S. W., Alpine.

The elections having been completed the next business proceeded with was the installation of officers.

President Moody appointed a committee to escort the newly elected president, Dr. J. C. LeGrand, of Birmingham, to the rostrum, whereupon Dr. LeGrand delivered the following address:

Fellow Members:

I desire to thank you most sincerely and heartily for the high honor you have just bestowed upon me. No one is more sensitive to appreciation by his friends than myself, or values more highly than I do evidences of their trust and confidence.

Since I entered the medical profession—now eighteen years ago—I have labored to the best of my ability for what I conceived to be the highest and best interests of that profession.

More than once have I been the recipient of official honors from my professional brethren which I regarded as testimonials of their confidence and esteem, but never before have I received an honor which I rate so high as the one I now gratefully accept from your generous hands.

Fully realizing the responsibilities which the position involves, I pledge you my best efforts to uphold the integrity and splendor of our organization, to promote

the accomplishment of the great objects for which we are striving, and to bring the entire medical profession of the state into harmonious and cordial fellowship. In these efforts I trust I shall have the active and unselfish co-operation of every member of the "Association," and with that I am confident that failure cannot occur.

This meeting—eminently successful both from a scientific and social standpoint—is now rapidly drawing to a close, but before it closes let us resolve that the next one shall in no wise fall below the high standard of success achieved in this.

Again I thank you for the splendid compliment paid me, in electing me as your president, and wish you all, when this meeting shall have adjourned, safe transit to your homes.

President LeGrand then announced the installation of the junior vice-president to be in order, whereupon Dr. S. G. Gay, of Selma, was escorted to the rostrum and installed into that position. Dr. Gay cordially thanked the Association for the honor, and expressed his intention of entering vigorously upon the work which the position involves.

The next officers installed were two members of the Board of Censors for terms of five years each.

Dr. E. H. Sholl, of Birmingham, succeeded himself, thus entering upon a third term.

Dr. Sholl spoke earnestly and fervidly of the work of the Association, and showed that his long service had intensified, rather than diminished, his zeal for the cause.

Dr. Glenn Andrews, of Montgomery, was next installed to succeed Dr. J. B. Gaston. A new member of the board, he pledged his best efforts to aid in advancing the interests of the Association.

The newly elected Orator, Dr. Rhett Goode, not being in the hall, the formality of presenting him to the Association was necessarily omitted.

Dr. E. H. Sholl, on behalf of the Board of Censors, reported that Dr. W. H. Sanders, whose term of office as state health officer expires with this meeting, had been re-elected to succeed himself for a term of five years.

On motion this action of the Board of Censors was unanimously approved.

The president then announced that the next business in order was the selection of a place for the next meeting of the Association.

Dr. J. L. Gaston extended a cordial invitation to the Association to hold its next meeting in Montgomery, and assured the members that the profession and people of that city would do all in their power to make the meeting a pleasant one.

The Association accepted the invitation, and decided by a vote to hold its next meeting in Montgomery.

Dr. R. S. Hill, of Montgomery, introduced the following preamble and resolution, which was unanimously adopted:

WHEREAS, The Medical Association of the State of Alabama has received extraordinarily kind and attentive treatment during its session in this city, now about to terminate, therefore be it

Resolved, That the thanks of this Association be and are hereby tendered to the citizens of Mobile for their generous hospitality; to the individual members of the profession in the City for their untiring efforts to add to our pleasure; to the Mobile County Medical Society for the complete arrangements to expedite our business, and for the magnificent "Luncheon" at which we were entertained; to the Medical department of the University of Alabama for the delight-

ful "Reception" given us; to Dr. W. H. Sanders, for the pleasant boat ride and many other attentions rendered; to the hotels and railroads for favors rendered; and to the Press of the City for the full and accurate reports of our deliberations.

After a few moments spent by the members in interchanging expressions of satisfaction with the harmony and success of the meeting, and of hopes that they would be permitted to meet at the next one, motion was made that the Association do now adjourn.

The motion having been adopted, President LeGrand announced that the Medical Association of the State of Alabama stood adjourned *sine die*.

THE ANNUAL REGISTER

OF THE

MEDICAL ASSOCIATION

OF THE

STATE OF ALABAMA.

THE BOOK OF THE ROLLS OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA.

☞ INTRODUCTION.—OF LEGAL IMPORTANCE TO EVERY PHYSICIAN IN THE STATE OF ALABAMA.

Owing to the legal relations which *each* member of *each* county medical society bears to the STATE OF ALABAMA (which relations are set forth in the Code of the State), it is *absolutely necessary* that the presidents, secretaries, treasurers, members of the boards of censors, and each individual member of the societies, should see that the roster of their society is sent to the Secretary of the State Association in accordance with the specific instructions, which are printed on the blanks sent to the secretary of each society.

It is, therefore, urged upon the officers of each county medical society to see that the reports be, in future, properly filled out in accordance with the printed instructions on the blank. It is advised that the secretaries compare their reports for the current year with the report, as printed in the Volume of Transactions for previous year and that *all* the changes be carefully made.

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A strict compliance with the instructions printed on the blank for report will avoid all difficulties.

Explanation.—The letters "mc" stand for "medical college"; the letters "cb" for "county board"; when the certificate is issued by the examining board of the county in the register of which it occurs, the name of the county is omitted; when the certificate was issued by the examining board of some other county, the name of such county succeeds the abbreviation. The first name of every board of censors is that of the president of the board. The letters "ng" stand for non-graduate." "Diploma recorded" applies to a small number of doctors, who are exempt from criminal prosecution, but who are illegal doctors.

THE ROLL OF THE COUNTY MEDICAL SOCIETIES.

REVISION OF 1899.

AUTAUGA COUNTY MEDICAL SOCIETY—Selma, 1874.

OFFICERS.

President, C. A. Edwards; Vice-President, M. D. Smith; Secretary. C. Rice; Treasurer, C. Rice; Health Officer, M. D. Smith. Censors—J. E. Wilkinson, M. D. Smith, C. A. Edwards, C. Rice, R. M. Davis.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Davis, Robert Merritt, mc univ Tulane 95, cb 95, Prattville.
Dennis, George A., mc Atlanta 93, cb 93, Huckabee.
Edwards, Charles Alva, mc Memphis 49, cb 80, Prattville.
Hagler, J. W., mc Alabama 94, cb Tuscaloosa 94, Prattville.
Rice, Clarence, mc Alabama 95, cb 95, Prattville.
Smith, Malcolm Daniel, mc univ New York 91, cb Coosa 91, Prattville.
Wilkinson, John Edward, mc univ Tulane 68, cb 80, Prattville.
Total, 7.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Davis, John William, mc Atlanta 59, cb 80, Prattville.
Gibson, William Beatty, mc Bellevue 89, state board 92, Autaugaville,
Golson, Wyatt Washington, mc South Carolina —, cb 84, Independence.
Goldson, Robert Morrison, mc univ Tennessee —, cb 94, Independence.

Huddleson, Robert Lee, mc Alabama 80, cb 92, Wadsworth.
Sherrill, Lewis James, mc univ Pennsylvania 60, cb 80, Pine Hill.
Total, 6.

Moved into the county—J. W. Hagler, from Montgomery county to Prattville.

BALDWIN COUNTY MEDICAL SOCIETY—Anniston, 1886.

OFFICERS.

President, V. McR. Showalter; Vice-President, P. M. Hodgson; Secretary, W. M. Lovelady; Treasurer, W. M. Lovelady; Health Officer, W. M. Lovelady. Censors—P. M. Hodgson, V. McR. Showalter, M. Coghlan, W. M. Lovelady, Sibley Holmes.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Coghlan, Malachi, mc Alabama 92, cb 93, Tensaw.
Hodgson, Phillip Melancthon, mc Alabama 88, cb 88, Stockton.
Howe, Charles Lester, mc s of m Kentucky 93, cb 93, Marlow.
Holmes, Sibley, mc Alabama 96, cb 96, Tensaw.
Lovelady, William Marshall, ———, cb 82, Bon Secour.
Showalter, Volney McReynolds, mc Alabama 90, cb 90, Point Clear.
Tramwell, Joseph D., mc univ Nashville 57, cb 89, Bay Minette.
Total, 7.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

G. L. Lambert, Bay Minette.
Total, 1.

BARBOUR COUNTY MEDICAL SOCIETY—Eufaula, 1878.

OFFICERS.

President, W. P. Copeland; Vice-President, Judson Davie; Secretary, H. L. Brannon; Treasurer, W. G. Lewis; Health Officer, C. L. Guice. Censors—H. L. Brannon, W. P. Copeland, B. S. Warren, C. L. Guice, W. H. Robertson.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Battle, Joseph Thomas, mc Georgia 67, cb 87, Hawkinsville.
Battle, Junius Kincade, mc univ Louisiana 83, cb 83, Eufaula.
Bennett, Benjamin Franklin, mc Alabama 93, cb 93, Louisville.
Brannon, Henry Lee, mc univ Vanderbilt 85, cb 85, Eufaula.
Copeland, William Preston, mc Bellevue 70, cb 79, Eufaula.
Davie, Judson, mc Georgia 72, cb 81, Cowikee.
Guice, Charles Lee, mc Chattanooga 93, cb Dale 93, Harris.
Haygood, John Waller, mc Alabama 98, cb Lowndes 98, Alston.
Houston, James LaFayette, mc univ Vanderbilt 98, cb 98, Eufaula.

Huey, George Washington, mc Alabama 91, cb Dale 97, Baker Hill.
Jones, Washington LaFayette, mc univ Louisville 75, cb Dale 87, Eufaula.
Lewis, William Gabriel, mc Atlanta 84, cb Henry 84, Eufaula.
Mitchell, William Augustus, mc univ Louisiana 68, cb 68, Eufaula.
Patterson, Thomas, mc Atlanta 69, cb 82, Louisville.
Robertson, William Henry, mc Alabama 87, cb 87, Clayton.
Smart, William Alexander, mc Louisville 83, cb Coffee 83, Clayton.
Wallace, George Oscar, mc Alabama 91, cb 91, Clio.
Warren, Benjamin Stewart, mc univ Tulane 91, cb 91, Clayton.
Winn, James Julius, mc Atlanta 68, cb 81, Clayton.
Total, 19.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Borders, James Thomas, mc Atlanta Southern 85, cb 85, Louisville.
Faulk, Daniel Winston, ng, cb 84, Clio.
Gilbert, Andrew Jackson, mc Atlanta 89, cb Russell 89, Eufaula.
Goodwin, Albert, mc Louisville 73, cb 79, Eufaula.
Herron, Darrell Jefferson, mc Atlanta 83, cb 83, Louisville.
Lingo, John Henry, ng, state board 97, Alston.
McInnis, James A., mc Memphis Hospital 96, cb 99, Clio.
Mitchell, Thomas Snead, mc Atlanta 66, cb Lee 83, Eufaula.
Turner, Alexander, mc South Carolina 57, cb 79, White Oak.
Weeden, Walter Ray, mc s of m Kentucky 94, cb 94, Eufaula.
White, Robert Lee, mc Alabama 98, state board 98, Mt Andrew.
Total, 11.

Moved into the county—John Waller Haygood, from Lowndes county to Alston; Walter Ray Weeden, from Enterprise, Coffee county to Eufaula.

Moved out of the county—Henry Reynolds Bradley, from Mt. Andrew to Elba, Coffee county; James Lewis Ellis, from Louisville to Dothan, Henry county; William Henry Harrison, from Baker Hill to Aberfoil, Bullock county.

Examinations—For the practice of medicine: James LaFayette Houston, mc univ Vanderbilt 98, certificate granted; James A. McInnis, mc Memphis Hospital 96, certificate granted.

Dr. Hamilton Moore Weeden, Sr., mc Albany, N. Y., 55, cb 79, Eufaula, has retired from practice of medicine.

BIBB COUNTY MEDICAL SOCIETY—Montgomery, 1875.

OFFICERS.

President, J. S. Moore; Vice-President, M. C. Schoolar; Secretary. A. E. Meadow; Treasurer, T. E. Schoolar; Health Officer, M. C. Schoolar. Censors—W. J. Nicholson, T. E. Schoolar, J. F. Curtis, A. E. Meadow, J. S. Moore.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bell, Walter Howard, mc Atlanta 88, cb Calhoun 88, Hargrove.
Campbell, Charles Monroe, mc univ Tennessee 94, cb 94, Scottsville.
Curtis, Joseph Franklin, mc Alabama 93, cb Shelby 93, Blocton.
Jones, John Wesley, mc ——— —, cb —, Randolph.
Jones. Rufus C., mc univ Montezuma 98, cb Shelby 98, Woodstock.
Krout, Charles Franklin, mc Alabama 95, cb 95, Pondville.
Meadow, Albert Eli, mc Pulte 83, cb Jefferson 83, Blocton.
Moore, James Samuel, mc phy and surg Baltimore 93, cb Jefferson 93, Six Mile.
Nicholson, William John, mc univ Vanderbilt 84, cb 86, Centreville.
Peacock, Edward Lovick, mc Alabama 92, cb Marengo 92, Blocton.
Schoolar, Milton Carson, mc Alabama 87, cb 87, Centreville.
Schoolar, Thornly Edward, mc univ Vanderbilt 92, cb 92, Centreville.
Trigg, Allen Warren, mc Alabama 81, cb Tuscaloosa 81, Blocton.
Whitfield, Oscar, mc Tennessee 80, cb 80, Brierfield.
Williams, James Wefford, mc Georgia 39, cb 79, Centreville.
Woolley, Charles Lewis, old law 69, cb Perry 79, Randolph.
Total, 16.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Adams, J. B., mc——— —, cb —, Oakmulgee.
Knighton, T. A., mc Louisville 88, cb Choctaw 88, Centreville.
Miller, J. T., mc univ Vanderbilt 86, cb Pickens 86, Lopez.
Moseley, David Orion, mc Washington 72, cb Perry 78, Harrisburg.
Sellers. Edward M., mc Alabama 97. cb 97, Randolph.
Stewart, Charles Jefferson, mc Alabama 91, cb 91, Abercrombie.
Ray, Jacob Usry, old law, 59, cb Tuscaloosa 82, Woodstock.
Total, 7.

Moved into the county—Walter Howard Bell, from Oxford to Hargrove; T. A. Knighton, from Butler to Centreville; J. W. Jones, from ——— to Randolph; Rufus C. Jones, from Dogwood to Woodstock.

Moved out of the county—Jacob Usry Ray, Jr., from Blocton to Greensboro; Thomas Claude Donald, from Centreville to Bessemer; C. M. Woolley, from Randolph to Atlanta, Ga.

Deaths—Benjamin Franklin Jones, Woodstock, mc Miami, 84, cb Jefferson 84, Hargrove.

*BLOUNT COUNTY MEDICAL SOCIETY—Mobile, 1876.

OFFICERS.

President, F. N. Hudson; Vice-President, P. M. Baker; Secretary, F. A. Gillespie; Treasurer, F. A. Gillespie; Health Officer, F. N. Hudson. Censors—F. N. Hudson, G. W. Self, W. T. Bains, J. L. Rains, F. A. Gillespie.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bains, William Thomas, mc univ Vanderbilt 88, cb 88, Cleveland.
Baker, Peter Matthews, mc Atlanta Southern 92, cb 92, Snead.
Clapp, William King, old law, ng, Gum Springs.
Cox, E. S. W., mc univ Tennessee 93, cb 93, Bangor.
Finley, William McLaughlin, mc univ Vanderbilt 79, cb 84, Blountsville.
Gillespie, Felix Augustus, mc Alabama 89, cb 89, Hanceville.
Hudson, Frank Norton, mc univ Vanderbilt 74, cb 76, Blountsville.
Mitchell, Henry Eugene, mc univ Vanderbilt 93, cb 93, Oneonta.
Moore, David Sanders, mc Atlanta 80, cb 80, Clarence.
Rains, John Leonidas, mc univ Vanderbilt 91, cb Marshall 91, Liberty.
Self, George Washington, mc univ Tennessee 89, cb 89, Selfville.
Total, 11.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Allgood, William Benton, mc Atlanta Southern 78, cb 78, Chepultepec.
Aldridge, Patrick George, mc Atlanta 76, cb 79, Brooksville.
Armstrong, Jesse Isham, mc Chattanooga 93, cb 93, Blount Springs.
Davidson, Alvin Steel, ng, cb 71, Selfville.
Donahoo, Floyd George, mc Atlanta Southern 81, cb —, Oneonta.
Haden, Andrew Wade, mc univ Vanderbilt 82, cb 82, Summit.
Haden, Henry Hughes, mc univ Vanderbilt 86, cb 86, Summit.
Harwell, James Thomas, mc Atlanta Southern 83, cb Cullman 87, Compton.
Hinds, W. T., mc ———, Summit.
Martin, Henry B., mc Atlanta Southern 88, cb 88, Arkadelphia.
McPherson, George Willis, mc univ Tennessee 87, cb Cullman 87, Country.
Roseman, William Lucius, mc s of m Kentucky 92, cb Walker 93, Arkadelphia.
Whaley, Peter, old law, ng, cb 77, Hanceville.
Total, 13.

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* NOTE.—As no report has been received from Blount county this year, the report for 1887 is here reproduced.

BULLOCK COUNTY MEDICAL SOCIETY—Selma, 1879.

OFFICERS.

President, R. H. Hayes; Vice-President, C. M. Franklin; Secretary, Seale Harris; Treasurer, S. C. Cowan; Health Officer, Seale Harris. Censors—C. H. Franklin, Seale Harris, R. H. Hayes, S. C. Cowan, H. M. Hunter.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Beasley, J. W., mc univ Bellevue —, cb — ———.
Britt, Walter Stratton, mc univ Bellevue 98, cb 98, Midway.
Butt, Richard Lemuel, mc univ New York 46, cb 80, Midway.
Cowan, Samuel Colvin, mc Alabama 89, cb 89, Union Springs.
Crymes, Augustus Clayton, mc Jefferson 56, cb 80, Midway.
Darnell, Benjamin Franklin, mc Atlanta 55, cb 83, Fitzpatrick.
Dean, T. Joseph, mc Louisville 94, cb Chambers 94, Union Springs.
Eidson, James Thomas, mc Alabama 94, cb 94, Fitzpatrick.
Franklin, Charles Higgs, mc univ Louisiana 66, cb 80, Union Springs.
Franklin, Charles Moore, mc Physicians and Surgeons' N. Y. 98, cb 98, Union Springs.
Harris, Seale, mc univ Virginia 94, cb 94, Union Springs.
Harris, Thomas Peyton, mc univ Vanderbilt 94, cb 94, Iverness.
Harrison, William Henry, mc Chattanooga 93, cb Barbour 93, Aberfoil,
Hayes, Robert Hughes, mc St. Louis 79, cb 80, Union Springs.
Hixon, F. P., mc univ Vanderbilt 98, cb 98, Perote.
Hunter, Henry Mitchell, mc phy and surg Baltimore 86, cb Barbour 87, Union Springs.
Reynolds, William Henderson, mc Alabama 85, cb 85, Union Springs.
Sessions, Llewellen, mc Georgia 48, cb 87, Union Springs.
Thomason, William Bartlett, mc Georgia 54, cb 80, Aberfoil.
Walker, William Austin, mc Jefferson 54, cb 80, Perote.
Total, 20.

PHYSICIANS NOT MEMBERS.

None.

Moved into the county—J. W. Beasley, from China Grove, Pike county; T. Joseph Dean, from Mathews Station, Montgomery county, to Union Springs; William Henry Harrison, from Spring Hill, Barbour county, to Aberfoil.

Moved out of the county—James Henry Pruett, from Midway to Atlanta; W. K. Jones, to Montgomery county.

Examinations—F. P. Hixon, mc univ Vanderbilt. Nashville 98, certificate granted. W. S. Britt, mc Belleview '98, certificate granted. C. M. Franklin, mc phys and surg, New York 98, certificate granted.

Deaths—Groves Caldwell, univ Pennsylvania 45, Midway; N. M. Bledsoe, univ Nashville 57, Union Springs, of septic pneumonia.

BUTLER COUNTY MEDICAL SOCIETY—Montgomery, 1875.

OFFICERS.

President, W. W. Mangum; Vice-President, J. A. Kendrick; Secretary, T. D. Stallings; Treasurer, T. D. Stallings; Health Officer, J. C. Hendrick. Censors—H. G. Perry, Henry Green, W. W. Mangum, E. G. Donald, J. C. Kendrick.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Allman, James Edward, mc Savannah 69, cb 79, Georgiana.
Broughton, John Thomas, mc univ Pennsylvania 52, cb 79, Greenville.
Brown, William Abner, mc St. Louis 84, Tuscaloosa 80, Garland.
Donald, Erskine Grier, mc Alabama 93, cb 93, Monterey.
Garrett, James Jefferson, mc Georgia Reform 82, cb 82, Forest Home.
Green, Henry, mc Alabama 92, cb Conecuh 92, Bolling.
Grissett, William Paners, mc Alabama 72, cb Moncoe 84, Garland.
Kendrick, Joel Cloud, mc univ Nashville 52, cb 78, Greenville.
Kendrick, John Aaron, mc univ Tulane 94, cb 94, Greenville.
Mangum, William Weightman, mc Atlanta 93, cb 93, Georgiana.
McCane, James Jordan, mc univ Tulane 82, cb 82, Glasgow.
Morris, William Eli, mc Alabama 97, cb Conecuh 97, Shell.
Perdue, James Lewis, mc Alabama 75, cb 79, Greenville.
Perry, Henry Gaither, mc Georgia Reform 88, cb 88, Greenville.
Smith, Robert Edward, mc Alabama 82, cb 83, Greenville.
Stallings, Thomas Daniel, mc Alabama 89, cb Lowndes 89, Greenville.
Thagard, Robert Albert, mc Tulane 97, cb 97, Greenville.
Watson, James Crawford, mc Alabama 98, cb 98, Georgiana.
Total 18.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Scott, Harvey Edward, mc univ Vanderbilt 80, cb Dallas 80, Georgiana.
Total, 1.

Moved into the county—Harvey Edward Scott, from Prattville to Georgiana.

Moved out of the county.—Charles Edwin Heartsill, from Manningham to Texas; Herbert Frank Saunders, from Greenville to parts unknown.

Examinations—L. V. Stabler, mc Vanderbilt 98, certificate granted. James Crawford Watson, mc Alabama 98, certificate granted.

Deaths—William Hance Reynolds, mc Alabama 93, cb 93, Runville; Conrad Wall, Sr., mc univ Nashville 59, cb 79.

CALHOUN COUNTY MEDICAL SOCIETY—Montgomery, 1881.

OFFICERS.

President, R. P. Huger; Vice-President, P. A. Brothers; Secretary, A. A, Greene; Treasurer, E. C. Anderson; Health Officer, J. M. Whiteside. Censors—J. M. Whiteside, W. B. Arberry, W. H. Kinnebrew, R. L. Bowcock, W. A. Smith.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Anderson, Edmonds Clack, mc s of m Kentucky 77, cb 85, Anniston.
Arberry, William Buchanan, mc univ Vanderbilt 82, cb Macon 82, Jacksonville.
Ayers, Thomas Wilborn, mc phy and surg Baltimore 86, cb 86, Anniston.
Bell, Alse Wilson, mc Alabama 97, cb Shelby 97, Weavers.
Bowcock, Robert Lee, mc univ Virginia 86, cb 88, Anniston.
Brock, Jefferson C., mc univ Vanderbilt 84, cb Randolph 84, Anniston.
Brothers, Phillip Houston, ng, old law 41, cb 86, Zula.
Davis, John Francis Marion, mc Atlanta 60, cb 80, Choccolocco.
Douthit, Andrew Jackson, ng, old law —, cb 81, Alexandria.
Gordon, Frederick Elliott, mc Alabama 82, cb Marengo 82, Anniston.
Greene, Allen Augustus, mc univ Vanderbilt 91, cb Chilton 91, Anniston.
Huger, Richard Proctor, mc South Carolina 71, cb 81, Anniston.
Hughes, Robert Lee, mc Atlanta 92, cb Cherokee 92, Choccolocco.
Kelly, John Baker, mc Jefferson 59, cb Coosa 84, Anniston.
Kinnebrew, William Henry, mc univ New York 78, cb 83, Piedmont.
Ligon, Arthur Wellington, mc univ Vanderbilt 83, cb Cleburne 84, Oxford.
Matthews, George Andrew, mc univ Michigan 66, cb 90, Anniston.
Smith, William Armistead, mc Alabama 81, cb Monroe 81, Anniston.
Walker, James Fleming, mc univ Louisville 92, cb 92, Anniston.
Whiteside, John McIntyre, mc univ Vanderbilt 84, cb 84, Oxford.
Williams, Benjamin Dudley, mc univ Louisville 81, cb 83, Oxford.
Total, 21.

Honorary Members.

Robertson, Thaddeus Lindley, mc Jefferson 61, cb 81, Birmingham.
Warren, William James, mc Atlanta 89, cb Tallapoosa 89, Anniston.
Wikle, Jessie Lane, (Druggist), mc Georgia 79, cb 81, Anniston.
Williams, Genaboth Coke, ng, cb 81, White Plains.
Total, 4.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Buckalew, Frederick Woodull, mc univ Grant 93, cb 95, DeArmanville.
Bullard, Aurelius Francis, ng, cb 81, Oxford.
Chapman, George Lyman, mc Atlanta 97, cb 98, Alexandria.
Hudson, T. H., mc Mobile —, cb —, DeArmanville.
Hughes, John Leander, mc Georgia 51, cb 83, Piedmont.
Linder, Phillip Pleasant, ng, cb 81, Jacksonville.
Little, William Worth, univ Vanderbilt 82, cb 82, Piedmont.
McCurry, Samuel Josephus, mc Atlanta 80, cb Cherokee 81, Anniston.

Sanders, Andrew J., —— cb Chambers 94, Ohatchee.
Teague, Francis Bowden, mc univ Tennessee 80, cb Etowah 80, Piedmont.
Thomas, Charles Edward, (col.) mc Long Island Hospital 90, cb 90, Anniston.
Turner, William M , mc Alabama 92, cb St. Clair 92, Anniston.
Vann, P. D., mc Alabama 96, cb DeKalb 96, Anniston.
Williamson, Thomas, ng, cb 84, Peeks Hill.
White, J. M., mc univ Vanderbilt —, cb Greene —, Anniston.
Whiteside, J. U., mc Alabama 96, cb 96, White Plains.
Total, 16.

Moved into the county—William M. Turner, from St. Clair county to Anniston; J. M. White, from North Carolina to Anniston; T. H. Hudson, from——— to DeArmanville.

Moved out of the county—W. H. Bell, to Hargrove, Bibb county.

CHAMBERS COUNTY MEDICAL SOCIETY—Montgomery, 1881.

OFFICERS.

President, B. F. Rea, Sr.; Vice-President, Z. T. Grady; Secretary, W. D. Gaines; Treasurer, W. D. Gaines. Censors—W. D. Gaines, W. H. Hudson, W. J. Love, T. H. Bonner.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bonner, Thomas Hamilton, mc Atlanta Southern 84, cb Randolph 84, Hickory Flat.
Gaines, William D., mc Alabama 92, cb 92, LaFayette.
Grady, Zachary Taylor, mc Atlanta 80, cb 81, LaFayette.
Finley, Emmett M., mc Southern 96, cb 96, Finley.
Hilt, John Leonard, mc Southern 89, cb Jefferson 89, Five Points.
Hudson, William Henry, mc Atlanta 86, cb 86, LaFayette.
Ison, Josiah Allen, mc Southern 87, cb Tallapoosa 87, Wise.
Love, William Joseph, mc Atlanta 82, cb Lee 85, LaFayette.
Lisle, John P., mc Birmingham 98, cb 98, Mill Town.
Newman, Samuel Harris, mc univ Memphis 98, cb 98, West Point, Ga.
Rutland, John Blake, mc Atlanta 80, cb 82, West Point, Ga.
Thompson, James F., mc univ Georgia —, cb 98, Langdale.
Ward, William Solomon, mc Southern 90, cb 95, Cusseta.
Total, 13.

Honorary Members.

Griggs, Asa Wesley, mc univ Nashville 55, cb 82, West Point, Ga.
Rea, Benjamin Franklin, Sr., mc Jefferson 42, cb 82, LaFayette.
Smith, Lawrence, mc Georgia 52, cb 82, Cusseta.
Total, 3.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Carmichael, Lawrence Green, mc Graffenburg 57, cb 82, Penton.
Chambers, ———, ——— —, cb 96, Langdale.
Coleman, Hiram F., mc Southern —, cb —, Stroud.
Davis, James Lawson, mc Alabama —, cb 82, LaFayette.
DeVaughan, John Wesley, mc univ Nashville 83, cb 83, Mill Town.
Floyd, M. F., mc ——— —, cb Lee —, Oakbowery.
Gay, William M., mc Southern —, cb Randolph —, Penton.
Grady, J. Lorenzo, mc Atlanta 95, cb 95, Fredonia.
Hamner, Lovic Pierce, mc ——— —, cb Randolph 82, Five Points.
Hodges, Wyatt T., mc Alabama 92, cb 97, River View.
Millford, H. A., mc ——— —, cb Lee —, Five Points.
Weldon, Robert L., mc Georgia Eclectic 92, (illegal), cb —, Langdale.
Total, 12.

Examinations—Samuel Harris Newman, mc Memphis 98, certificate granted.

CHEROKEE COUNTY MEDICAL SOCIETY—Tuscaloosa, 1887.

OFFICERS.

President, H. L. Ison; Vice-President, T. G. Miller; Secretary, R. L. McWhorter; Treasurer, A. C. Shamblin; Health Officer, R. L. McWhorter. Censors—H. L. Appleton, H. L. Ison, S. C. Tatum, A. C. Shamblin, R. L. McWhorter.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Appleton, Hugh Lowndes, mc univ Vanderbilt 92, cb 92, Center.
Crumpton, W. H., ——— —, cb —, Alexis.
Elliott, Theodoric Miles, mc s of m Kentucky 76, cb 87, Grassland.
Farill, John Paul, mc Atlanta 81, cb 87, Farill.
Farill, John Washington, ng, old law cb 87, Farill.
Ison, Hartford Lee, mc Atlanta Southern 91, cb Tallapoosa, 91, Round Mountain.
McWhorter, Robert Lee, mc Alabama 87, cb 87, Gaylesville.
McGhee, Robert Hallens, mc univ Vanderbilt 87, cb 87, Round Mountain.
Miller, Thomas Gideon, mc s of m Kentucky 86, cb 86, Gaylesville.
Sharp, George Barnabas, mc Atlanta Southern 93, cb 93, Rock Run.
Shamblin, John Louis, mc Atlanta 88, cb 88, Broomtown.
Shamblin, Arthur C., mc Chattanooga 92, cb 94, Broomtown.
Tatum, Samuel Carter, mc univ Vanderbilt 93, cb 93, Center.
Total, 13.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Brown, A. M., mc ——— —, cb —, Round Mountain.
Bomar, Richard Ritter, mc Atlanta Southern 85, cb 85, Bomar.

Cook, Edward Augustus, mc univ Vanderbilt 84, cb 84, Kirks Grove.
Darnell, William Clement, mc univ Vanderbilt 90, cb 90, Center.
Jones, H. S., mc ——— —, cb —, Moshat.
Matthews, John Patrick, mc univ Nashville 86, cb 87, Maple Grove.
Morgan, W. T., mc univ Vanderbilt 92, cb Calhoun 96, Rock Run.
Shamblin, Arnold, ng, cb 87, Broomtown.
Slack, John C., mc——— —, cb 87, Slackland.
Story, C., ng, cb 86, Key.
White, Thomas Noel, mc univ Georgia, 57, cb 87, Spring Garden.
White, William Yancey, mc univ Vanderbilt 87, cb 87, Spring Garden.
Wills, ———, illegal.
Wright, Luther, mc Atlanta Southern 98, cb 98, Forney.
Total, 14.

Moved into the county—A. M. Brown, from Marshall county to Round Mountain.

Deaths—Barabas Pace White, mc univ Georgia 59, cb 87, Spring Garden, of mastoid disease; Z. M. Little, drowning.

CHILTON COUNTY MEDICAL SOCIETY—Selma, 1879.

OFFICERS.

President, W. E. Stewart; Vice-President, E. A. Matthews; Secretary, D. A. Campbell; Treasurer, ———; Health Officer,———.
Censors—W. E. Stewart, E. A. Matthews, D. A. Campbell.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Caffey, Hugh William, mc South Carolina 55, cb Lowndes, 83 Verbena.
Campbell, David A., univ Louisville —, cb 98, Clanton.
Claughton, Alza B., mc Atlanta —, cb —, Maplesville.
Dawson, George Washington, mc Alabama 94, cb 94, Verbena.
Johnson, Joseph Samuel, mc Baltimore 76, cb 86, Clanton.
Lane, Kenneth Fountain, mc Atlanta —, cb 98, Jemison.
Matthews, Emmet Abram, mc Alabama 87, state board 86, Clanton.
McNeil, R. Berney, mc Birmingham 98, cb 98, Jemison.
Parnell, Charles Nickols, mc Alabama 91, cb 91, Stanton.
Stewart, William Eugene, mc Louisville 75, cb 79, Clanton.
Wise, William Tell, mc Atlanta, 89, cb 94, Coopers.
Total, 11.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Dawson, James Jefferson (old law), cb Autauga 56, Verbena.
Hayes, Julius Poe, mc Memphis 96, cb 96, Jemison.
Johnson, Joseph Samuel, Sr., mc Georgia 59, cb Dallas 79, Clanton.
Pitts, John Spate, mc Nashville 68, cb 79, Verbena.
Wise, John F., mc Graffenburg 56, cb 79, Coopers.
Total, 5.

Moved into the county—David A. Campbell, from Texas to Clanton; Alza B. Claughton, from Shelby county to Maplesville; Kenneth Fountain Lane, from Georgia to Jemison.

Moved out of the county—Andrew Jackson L. Dennis, from Coopers to Montgomery; Alonzo J. Marlar, from Stanton to Autauga county; Vaughn H. Caine, from Clanton to Perry county; Joseph Phillip Givhan, from Jemison to Shelby county.

Deaths—John Archibald McNeil, mc univ Tennessee 53, cb 86, Jemison.

CHOCTAW COUNTY MEDICAL SOCIETY—Selma, 1879.

OFFICERS.

President, J. P. Phillips; Vice-President, Samuel Alman; Secretary, J. L. Granberry; Treasurer, J. L. Granberry; Health Officer, J. L. Granberry. Censors—J. P. Phillips, R. F. Moody, J. L. Granberry.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Alman, Samuel, mc univ Louisville 99, cb 99, Melvin.
Clarke, Ferdinand Payne, mc Alabama 84, cb Marengo 84, Bevill.
Granberry, Joseph Langley, mc univ Louisville 91, cb 91, Pushmataha.
Johnson, Samuel F., ng —, Butler.
Lenoir, Thomas Rutledge, mc Alabama 92, cb 92, Womack Hill.
Moody, Robert Franklin, mc univ Louisiana 60, cb 79, Butler.
Needham, Eli Wigginton, mc univ Louisiana 58, cb 79, Lusk.
Phillips, Jacob Parker, mc Alabama 85, cb 85, Yantley.
Young, Robert Lee, mc Alabama 86, cb Marengo 88, Mt. Sterling.
Total, 9.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Brown, Collin Balsam, mc —, cb —, Cocoa.
Christopher, Franklin Evans, mc —, cb —, Isney.
Christopher, John C., mc —, cb —, DeSotoville.
Kimbrough, William F., mc —, cb —, Pushmataha.
Robinson, Amos N., mc —, cb —, Pennington.
Turner, Mathew, mc —, cb —, Bladon Springs.
Total, 6.

Moved into the county—Wm. F. Kimbrough, from Clarke county to Pushmataha; Samuel Alman, from ——— to Melvin.

Moved out of the county—Luke Gavin; Thomas Abram Knighton, from Butler to ———.

Examinations—Samuel Alman, mc univ Louisville 99, certificate granted; Luke Gavin, mc —, cb —, certificate granted; John H. Hendrix, mc —, cb —, certificate refused.

CLARKE COUNTY MEDICAL SOCIETY—Greenville, 1885.

OFFICERS.

President, W. A. Kimbrough; Vice-President, L. O. Hicks; Secretary, C. E. Pugh; Treasurer, J. T. Pugh; Health Officer, G. S. Chapman. Censors—G S Chapman, J. W. Fleming, B. Boroughs, J. A. Gilmore, J. G. Jeffrey.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Armistead, James Westwood, mc Alabama 83, cb 84, Grove Hill.
Barefield, Henry Litman, mc Alabama 72, cb Cherokee 87, Gosport.
Barnes, Benjamin Shields, mc univ Pennsylvania 59, cb 84, Suggsville.
Boroughs, Bryan, mc univ Louisville 70, cb 84, Jackson.
Cobb, Jesse Monroe, mc univ Tulane 93, cb 93, Grove Hill.
Dahlberg, Charles Isaac, mc Alabama 87, cb Choctaw 88, Suggsville.
Davis, Henry George, mc Alabama 72, cb 84, Gainestown.
Fleming, John William, mc Alabama 79, cb 84, Salitpa.
Gilmore, John Arcade, mc univ Louisville 86, cb 86, Thomasville.
Hicks, Lamartine Orlando, mc Alabama 73, cb 84, Jackson.
Jeffrey, James Grey, mc Alabama 88, cb 88, Whatley.
Jones, Green Irwin, mc Atlanta 82, cb 84, Coffeeville.
Kimbrough, William Augustus, mc Alabama 95, cb 95, Glendon.
Pugh, Albert Sidney, mc s of m Kentucky 92, cb 93, Grove Hill.
Pugh, Clement Eugene, mc Alabama 89, cb 89, Grove Hill.
Pugh, John Talbert, mc Alabama 97, cb 97, Jackson.
White, Alec, mc Alabama 98, cb 98, Vashti.
Total, 17.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Armistead, Lee, ng, Campbell.
Bush, Boaz Whitfield, mc South Carolina 58, cb 84, Choctaw Corner.
Cobb, William F., mc Alabama 95, cb 95, Barlow Bend.
Davidson, James, mc Alabama 90, cb 90, Thomasville.
Kimbrough, John, mc Alabama 98, cb 98, Thomasville.
Prim, Thomas Jefferson, ng, Salitpa.
Robinson, Amos N., mc Alabama 93, cb 93, Coffeeville.
Total, 7.

Moved into the county—Green Irwin Jones, from Sumter county to Coffeeville.

Moved out of the county—Thomas Kimbrough; T. C. Kirvin to Texas.

CLAY COUNTY MEDICAL SOCIETY—Tuscaloosa, 1887.

OFFICERS.

President, Thomas Northen; Vice-President, A. R. Stephens; Secretary, C. P. Gay; Treasurer, S. J. Gay; Health Officer, Thomas Northen. Censors—J. H. Garrett, A. K. McDairmid, C. S. Northen, A. R. Stephens, S. J. Gay.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Darby, Cunningham Wilson, ng, cb 87, Rozell.
Garrett, John Henry, mc Atlanta Southern 92, cb 92, Delta.
Gay, Coleman Pendleton, mc Atlanta Southern 97, cb Randolph 97, Lineville.
Gay, Stonewall Jackson, mc Atlanta Southern 88, cb Randolph 88, Lineville.
Irvin, William Fletcher, mc univ Louisville 87, cb 87, Millerville.
Jordan, John Wiley, mc Atlanta 91, cb 91, Ashland.
Manning, John Thomas, mc univ Vanderbilt 85, cb 87, Wesobulga.
McDairmid, Angus Kelly, mc Alabama 72, cb 87, Hollins.
Northen, Thomas, mc Atlanta 78, cb 87, Ashland.
Northen, Charles Stephens, mc Atlanta 91, cb 89, Ashland.
Owens, Seaborn Wesley, ng, cb 87, Bluff Springs.
Sims, George Nelson, mc Graffenburg 56, cb 87, Ashland.
Stephens, Albert Russell, mc Atlanta Southern 88, cb 88, Delta.
Stephens, Burrell Anderson, mc Alabama 92, cb 92, Lineville.
Total, 14.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

McDairmid, J. C., ng, cb 87.
Harris, D. C., ng, cb 87.
Total, 2.

CLEBURNE COUNTY MEDICAL SOCIETY—Selma, 1884.

OFFICERS.

President, W. H. Lindsey; Vice-President, J. D. Cramer; Secretary, Jas. W. Kaylor; Treasurer, T. J. Johns; Health Officer, S. L. B. Black. Censors—T. J. Johns, J. D. Cramer, W. H Lindsey, T. L. Thomason, J. A. Ligon.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Abercrombie, H. S., ng, state board 98, Edwardsville.
Black, S. L. B., mc Ohio 69, cb 98, Fruithurst.
Cramer, James David, mc Atlanta Southern 93, cb 93, Abernathy.
Johns, Thomas Jefferson, mc Alabama 88, cb 93, Edwardsville.
Kaylor, James W., mc Atlanta Southern 97, cb 97, Arbacoochee.
Lindsey, William Henry, mc Chattanooga 94, cb 94, Fruithurst.

Lindsey, J. M., mc Chattanooga 97, cb 97, Fruithurst.
Ligon, James A., mc univ Vanderbilt 91, cb 91, Oakfuskee.
Morgan, W. H., mc Rush 74, cb 97, Fruithurst.
Pennington, James Edward, mc univ Georgia 88, cb 94, Esau Hill, Ga.
Reid, Rhesa Thomas, ng, cb 84, Edwardsville.
Roberts, David P., ng, cb 84, Oak Level.
Thomason, Thomas Luther, mc Baltimore 96, cb 96, Heflin.
Williams, Sidney Lorenzo, mc Chattanooga 94, cb 94, Hightower.
Total, 14.

Honorary Members.

Hudgens, Noel C., mc Georgia 47, cb 84, Oak Level.
Ligon, William M., mc Georgia, 61, cb 84, Oakfuskee.
Total, 2.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Holiday, Dr., (illegal),———, Oakfuskee.
Putt, Dr., (illegal), ———, Fruithurst.
Simpson, J. L., mc Atlanta 80, cb Coosa 83, Heflin.
Sorrell, J. W., mc ———, Chulafinnee.
Total, 4.

Moved out of the county—R. W. Dowdy, from Hightower to Randolph county; J. M. Harrison, from Heflin to Mississippi; W. H. Morgan, from Fruithurst to Chicago; D. B. Harris, from Beason's Mill to Munford.

Examinations—W. H. Crumpton, of Alexis, certificate granted; S. L. B. Black, of Fruithurst, certificate granted.

Death—Orlando Waters Shepard, mc Graffenburg 55, cb 84, Feb. 17, 1899 of heart failure.

COFFEE COUNTY MEDICAL SOCIETY—Greenville, 1885.

OFFICERS.

President, W. W. Grubbs; Vice-President, B. A. Hill; Secretary, N. M. Ham; Treasurer, H. F. A. Harp; Health Officer, H. F. A. Harp. Censors—W. W. Grubbs, B. R. Ballard, H. F. A. Harp, B. A. Hill, W. A. Lewis.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Ballard, Benjamin Randall, mc univ Tennessee 94, cb Crenshaw 94, Alberton.
Bradley, Henry Rudolph, mc Alabama 96, cb Barbour 96, Elba.
Colley, Aaron Thomas, mc univ Louisville 94, cb Pike 94, Enterprise.
Carter James Beston, ng, cb 89, Leverett.
Dalton, Tobe E, mc Georgia Eclectic 94, cb 96, Curtis.

Grubbs, William Westford, mc univ Louisville 89, cb Covington 90, Enterprise.
Ham, Nelson Matthews, mc, Alabama 98, cb 98, Elba.
Hill, Benjamin Augustus, mc Richmond 60, cb 85, Elba.
Harp, Hector Frederick Augustus, mc Alabama 93, cb 93, Elba.
Lewis, Walter Augustus, mc univ Tulane 97, cb Barbour 97, Enterprise.
Loflin, Daniel Thomas, mc Alabama 97, cb 97, Victoria.
Matheny, William Fourth, mc Atlanta 95, cb 97, Eta.
Phillps, J. P., mc Memphis 98, cb Dale 98, Brockton.
Rushing, Francis Marion, mc univ Louisiana 51, cb 85, Elba.
Total. 14.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Andrews, ——, Enterprise.
Blue, Jasper Dixon, ng, cb 85, Elba.
Crook, William Henry, mc Alabama 84, cb 85, Victoria.
Howell, David E. (legal), Damascus.
Malone, Eugene Yervell, mc Alabama 92, cb Escambia 92, Damascus.
Steed, John Wesley, mc univ Nashville 56, cb 85, Haw Ridge.
Wilson, William Augustus' mc Atlanta Southern 56, cb 86, Elizabeth
Total, 7.

Moved into the county—H. R. Bradley, from Barbour county to Elba; A. T. Colley, from Macon county to Enterprise; E. Y. Malone, from Whitfield, Fla., to Damascus; J. P. Phillips, frome Dale county to Brocton.

Moved out of the county—P. T. Fleming, from Clintonville to Dothan, Henry county.

Examinations—Nelson Matthews Ham, mc Alabama 98, certificate granted.

COLBERT COUNTY MEDICAL SOCIETY—Montgomery, 1881.

OFFICERS.

President, H. W. Blair; Vice-President, C. R. Palmer; Secretary, H. B. Thompson; Treasurer, H. B Thompson; Health Officer, H. B. Thompson. Censors—H. W. Blair, E. P. Rand, Edgar Rand, C. R. Palmer, H. B. Thompson.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Blair, Hugh Walter, mc univ Vanderbilt 88, cb 88, Sheffield.
Burns, William Arthur, mc Memphis Hospital 91, cb Lamar 91, Sheffield.
McWhorter, George Tilghman, mc univ Louisville —, cb 81, Riverton.
Moore, Riley Jackson, mc univ Louisville —, cb 81, Riverton.
Palmer, Charles Richard, mc univ Vanderbilt 83, cb 83, Tuscumbia.

Rand, Edgar, mc Alabama 78, cb Lawrence 78, Leighton.
Rand, Edward Pearsall, mc univ Tulane 72, cb 81, Tuscumbia.
Robinson, John Abner Pruett, mc St. Louis 72, cb 78, Leighton.
Thompson, Humphrey Bate, mc Louisville 93, cb 93, Tuscumbia.
Walker. David Harris, mc univ Vanderbilt 81, cb 82, Spring Valley.
Total, 10.

Honorary Member.

Wall, Alfred Alexander, mc univ Pennsylvania 49, cb Madison 78,
Total, 1.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Carter, Parkerson Patrick, mc univ Louisville 66, cb, 79, Brick.
Gilmore, Francis T, mc univ Louisville —, cb (retired) —, Tuscumbia.
King, Benjamin Rush, mc univ Pennsylvania 58, cb 78, Leighton.
King, Frederick Rush, mc univ Alabama 94, cb — Leighton.
Masterson, Albert Aaron, mc univ Louisville 89, cb 89, Cherokee.
Masterson, John H, mc univ Louisville 89, cb 89, Cherokee.
Masterson, John Thomas, mc univ Pennsylvania 78, cb 78, Leighton.
McClellan, J. D., mc Alabama 97, cb 97, Spring Valley.
McCluskey, James A., mc —, cb —, Dug.
Morris, Charles Thomas, mc univ Louisville 75, cb Henry 78, Sheffield.
O'Reily, Jonn Edmund, mc Alabama 74. cb 84, Cherokee.
Smith, James Clark, mc univ Vanderbilt 85, cb Elmore 85, Tuscumbia.
Wiley, James E., mc Alabama 98, cb 98, Tuscumbia.
Williams, Charles W, mc —, cb Cherokee —.
Total, 14.

Moved out of the county—W. H. Lovelady, from Sheffield to Albertville, Marshall county; B. F. Johnson, from Sheffield to Clinton, Tenn.

Examinations—B. F. Johnson, mc univ Nashville 98, certificate granted; James E. Wiley, mc Alabama 98, certificate granted.

Deaths—Beverly Johnson, March 1899; typhoid fever.

CONECUH COUNTY MEDICAL SOCIETY—Selma, 1879.

OFFICERS.

President, P. M. Bruner; Vice-President, R. T. Holland; Secretary, Andrew Jay; Treasurer, Andrew Jay; Health Officer, Andrew Jay. Censors—Marcellus McCreary, Andrew Jay, J. C. Snead, R. T. Holland, P. M. Bruner.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bradley, Ely, mc univ Pennsylvania 59, cb 84, Bellville.
Bruner, Pinckney McDonald, mc Alabama 61, cb Lowndes 79, Evergreen.
Fountain, Hugh Thomas. mc Alabama 72, cb Monroe 79, Burnt Corn.
Holland, Richard Thomas, mc Alabama 90, cb Escambia 90, Castleberry.
Jay, Andrew, mc Alabama 72 cb 84, Evergreen.
McCreary, John Absalom, mc univ Louisiana 60, cb 84, Evergreen.
McCreary, Marcellus, mc univ Tulane 96, cb 96, Evergreen.
Mixon, John Nelson, Jr., mc Louisville 99, cb 99, Commerce.
McKittrick, Adam Alexander, mc univ Georgia 60, cb 84, Evergreen.
McMillan, Thomas Morton, mc univ Tulane 91, cb Monroe 91, Brooklyn.
Ruback, Carl, mc Memphis 96, cb 96, Evergreen.
Shaver, William Benjamin, mc Georgia Reform 60, cb 84, Herbert.
Snead, Junius Charlesworth, mc univ Tulane 96, state board 96, Brooklyn.
Stallworth, Emmett Lemuel, mc Alabama 94, cb 94, Evergreen.
Taliaferro, Charles Thomas, mc Atlanta 59, cb 84, Evergreen.
Tatum, Fletcher Lothair, mc Atlanta 95, cb Pike 95, Brooklyn.
Watson, William, mc Alabama 93, cb 93, Repton.
Total, 17.

Honorary Member.

Belo, Arther Frederic, mc Jefferson 70, Evergreen.
Total, 1.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Erwin, ——, mc Jefferson 61, Evergreen.
Ilderton, H. W., mc univ Georgia cb 98, Bellville.
Russell, James Thomas, mc Georgia Reform 61, Evergreen.
Total, 3.

Moved into the county—H. W. Ilderton, from near Charleston, S. C. to Bellville.

Examinations—John Nelson Mixon, Jr., mc Louisville 99, certificate granted; H. W. Ilderton, mc univ Georgia —, certificate granted.

Deaths—William Chesley Shaw, mc Alabama 85, cb 85, died November 12th, 1898 of hemorrhagic malarial fever.

COOSA COUNTY MEDICAL SOCIETY—Birmingham, 1883.

OFFICERS.

President, A. J. Peterson; Vice-President, W. J. Peddy; Secretary, Julius Jones; Treasurer, Eugene Argo; Health Officer, J. W. Pruett.

Censors—Julius Jones, A. J. Peterson, W. J. Peddy, Eugene Argo, J. C. Cousins.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Argo, Eugene, mc univ Vanderbilt 91, cb 91, Goodwater.
Bailey, William, ng, cb 83, Equality.
Cousins, James Columbus, mc univ Maryland 91, cb 91, Equality.
Dunlap, William B., ng, cb 85, Hollins.
Holloway, William A., mc Alabama 89, cb Tallapoosa 89, Kellyton.
Jones, Julius, mc Vanderbilt 84, cb 84, Rockford.
McKinney, Eugene P., mc univ Louisville 93, cb 93, Kellyton.
Moon, William Henry, mc Alabama 79, cb 83, Goodwater.
Peddy, William Jeremiah, mc Graffenberg 55, cb 84, Rockford.
Peterson, Albert James, mc Vanderbilt 89, cb 89, Hanover.
Pope, Chandler Matthew, mc Jefferson 57, cb 83, Goodwater.
Pruett, James W., mc Alabama 92, cb Talladega 93, Weogufka.
Total, 12.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Dollar, Henry Clay, mc Atlanta 75, cb 83, Marble Valley.
Goggans, Phillip Peterson, mc univ New York 80, cb 80, Traveller's Rest.
Mathews, John Thomas, mc univ Tulane 73, cb 84, Hanover.
Maxwell, Cecil Kelly, mc Alabama 92, cb 92, Kellyton.
Nolen, Richard Spencer, mc s of m Kentucky 89, cb 89, Equality.
Salter, Paschal Preston (Botanist), cb 84, Goodwater.
White, William Tanner, mc univ Tennessee 86, cb 86, Rockford.
Total, 7.

Examinations—John W. Grimes, Weogufka.

*COVINGTON COUNTY MEDICAL SOCIETY—Montgomery, 1888.

OFFICERS.

President, W. E. Sentell; Vice-President, J. R. Ealum; Secretary, W. M McNair: Treasurer, J. R. Ealum; Health Officer, W. N. McNair. Censors—W. E. Sentell, J. R. Ealum, T. C. Bozeman, W. T. Stenson, W. N. McNair.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bozeman, T. Compton, mc Alabama 92, cb 93, Searight.
Ealum, James R., mc Alabama 91, cb 91, Oakey Streak.
McNair, William Neil, mc Alabama 90, cb 91, River Falls.
Sentell, Wilbur Eugene, mc Alabama 89, cb 91, Andalusia.
Stenson, William T., mc Atlanta 91, cb 91, Rose Hill.
Street, William N., mc ——— —, cb —, Hilton.
Total, 6.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Atkinson, Alexander G., ng, Red Level.
Baggett,———, mc ——— —, cb —, Eclectic.
Brown, T. J., (illegal), Rat.
Cawthorn, Samuel J. S., ng, cb 90, Andalusia.
Patrick, Thomas, ng. Green Bay.
Miller, ———, (illegal), Florella.
Pierson, W. W., (illegal), Red Level.
Roberts, James M., ng, Beda.
Sellers, Thomas L., ng. Andalusia.
Whaley, James A., ng, Green Bay.
Total, 10.

NOTE.—As no report has been received from Covington county this year, the report of 1896 is here reproduced.

CRENSHAW COUNTY MEDICAL SOCIETY—Mobile, 1882.

OFFICERS.

President, J. R. Horn; Vice-President, F. M. T. Tankersley; Secretary, C. R. Rushton; Treasurer, C. R. Rushton; Health Officer, G. S. Tankersley. Censors—J. R. Horn, F. M. T. Tankersley, C. R. Rushton, S. W. May, A. J. Jones.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Avant, William Watts, mc univ Tennessee 90, no certificate, Patsburg.
Broughton, Louis Edward, mc univ Tulane 93, cb Butler 93, Searight.
Burgamy, William Thomas, mc Jefferson 59, cb 88, Rutledge.
Coston, William Henry, mc Atlanta Southern 88, and New Orleans 94, cb 89, Brantley.
Horn, Joseph Robert, mc Alabama 87, cb 87, Luverne.
Horn, Richard Kersey, mc Electic of Georgia 81, cb 84, Bullock.
Jones, Andrew Jackson, mc s of m Kentucky 85, cb 86, Highland Home
Kendrick, James Evans, mc Alabama 69, cb 82, Luverne.
Knight, William Peter. mc Atlanta Southern 92, and New Orleans 94, cb Butler 92, Luverne.
May, Samuel William, mc phy and surg Baltimore 82, and New York Pol. 95. cb 83, Brantley.
Odom, William F., mc univ Tennessee 94, cb Coffee 94, Johnson.
Rushton, Christopher Reid, mc Atlanta Southern 92, cb Covington 92, Rutledge.
Sheppard, Charles Webb, mc Atlanta Southern 91, cb Butler 91 Honoraville.
Stough, Thomas Jefferson, mc univ Tennessee 93, cb 93, Petrey.

Tankersley, Felix Marcus Tullius, mc univ Tennessee 85, and Tulane 95, cb 85, Highland Home.
Tankersley, George Stewart, mc univ Tulane 93, cb 93, LaPine.
Thrower, Steven Simon, ng, cb 84, Bradleyton.
Total, 17.

Honorary Members.

Williamson, George Washington, mc Alabama 93, cb Crenshaw 93, Goshen.
Total, 1.

Dr. Williamson lives at Goshen which is in Pike county near the line of Crenshaw and Pike counties but nearer to Luverne than to Troy and is more convenient to Luverne, consequently attends the meetings of the Crenshaw county board and is an Honorary member and is allowed all the rights and privileges of a regular member.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Bozeman, T. C., mc Alabama 92, cb Covington 92, Searight.
Dyer, Edward Fox, ng, cb 84, Rutledge.
Eiland, Thomas C., mc Birmingham 98, cb 98, Bullock.
Ford, Julian, mc ——— —, cb Pike —, Bradleyton.
Moxley, David Newton, ng, cb Pike 78 Glenwood.
Pryor, William Dayton, mc univ Nashville 57, cb Butler 81, Aiken.
Ray, Thomas Quincy, mc Atlanta Southern 94, cb 94, Dozier.
Richardson, Roddie, mc univ Tennessee 98, cb 98, Saville.
Total, 8.

Moved out of the county--T. Reid Yarbrough, to Montgomery.

Examinations—Thos. C. Eiland, mc Birmingham 98; Roddie Richardson, mc univ Tennessee 98; T. Reid Yarbrough, mc univ Tennessee 98 Certificates granted.

CULLMAN COUNTY MEDICAL SOCIETY—Anniston, 1886.

OFFICERS.

President, G. Hartung; Vice-President, G W. Watts; Secretary, E. Hays; Treasurer, E. Hays; Health Officer, R. H. Baird. Censors—G. Hartung, E. Hays, J. J. Crumbley, G. W. Watts, R. H. Baird.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Ainsley, John Smith, mc Atlanta 76, cb Lowndes 78, Trimble.
Baird, Robert Henry, mc Alabama 92, cb Blount 92, Cullman.
Brindley Bethea Pace, mc Atlanta Southern 92, cb 92, Simcoe.
Crumbley, Jesse James, mc Atlanta 92, cb 94, Holly Pond.
Hartung, Goettloeb, mc Wurtemburg. Germany, 78, cb 92, Cullman.
Hays, Elbert, mc univ Grant 92, cb 92, Cullman.

Humphries, Roman Willis, mc Atlanta Southern 92, cb 96, Logan.
Martin, William Henry, mc Atlanta 88, cb 89, Ruby.
Moon, George Francis, mc Memphis 94, cb 95, Bremen.
Price, William Henry, mc univ Tennessee 90, cb Cleburne 98, Crane Hill.
Terrell, Early Walton, mc Nashville 88, cb Elmore 89, Cullman.
Walling, John Henry, ng, cb 89, Vinemont.
Watts, George Wesley, mc Atlanta Southern 88, cb 89, Holly Pond.
Total, 13.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Burnum, Francis Marion, mc Nashville 79, cb 86, Cullman.
Cossey, Thomas Watson, mc Atlanta Southern 91, cb 96, Jones' Chapel
Harris, George Riley, ng, cb 92, Garrison Point.
Keller, Louis Martin, mc Atlanta 88, cb 88, Etha.
McDonald, William Alexander, ng, cb 89, Baileyton.
Oden, James Henry, ng, cb 88, Unity.
Winn, Joseph Jefferson, mc univ Vanderbilt 89, cb 96, Baileyton.
Yielding, John, mc univ Grant 94, cb 94, Walter.
Total, 8.

Moved into the county—William Henry Price, from Pelican, Winston county to Crane Hill, Cullman county.

DALE COUNTY MEDICAL SOCIETY—Tuscaloosa, 1887.

OFFICERS.

President, R. D. Reynolds; Vice-President, S. M. C. Howell; Secretary, R. F. Harper; Treasurer, R. F. Harper; Health Officer, ———. Censors—R. F. Harper, B. L. Byrd, R. D. Reynolds, F. B. Cullens, E. B. Ard.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Ard, Erastus Byron, mc univ Vanderbilt 87, cb 87, Ozark.
Barnes, Charles Duncan, mc Alabama 97, cb 97, Skipperville.
Belcher, William Ree, mc Atlanta Southern 90, cb 91, Daleville.
Bell, Seaborn Bentley, mc Georgia Reform 92, cb 95, Echo.
Blackshear, George Henry, mc s of m Kentucky 96, cb 96, Charlton.
Byrd, Benjamin Littlebury, mc Alabama 92, cb 92, Daleville.
Coleman, Benjamin Franklin, mc univ Nashville 61 and New York 69, cb Bullock 75, Ozark.
Cullens, Frederick Bacon, ng, state board 97, Ozark.
Harper, Robert Franklin, mc Alabama 88, cb Coffee 88, Ozark.
Holman, John Clinton, mc Jefferson 56, cb 87, Ozark.
Holman, Henderson Looney, mc Memphis 98, cb Marion 98, Ozark.
Howell, Samuel Matthew Crawford, mc Atlanta 91, cb 91, Midland City.

Mixson, William Daniel, mc Chattanooga 98, cb 98, Haw Ridge.
Reynolds, Robert Davis, mc Alabama 80, cb 87, Ozark.
Steagall, William Collinsworth, mc South Carolina 60, cb 87, Ozark.
Total, 15.

Honorary Members.

Bottoms, James, mc Augusta 56, cb 87, Ozark.
Total, 1.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Baxter, Hugh Curry, mc Atlanta 86, cb 87, Midland City.
Campbell, Terrell Taylor, mc Georgia Reform 83, cb 87, Pinckard.
Cowart, William Augustus, ng, cb Coffee 85, Charlton.
Dalton, Christopher Columbus, mc Georgia Reform 91, diploma recorded 91, Wicksburg.
Davie, Mercer Stillwell, mc Jefferson 67, cb 87, Pinckard.
Morris, Andrew Jackson, mc Atlanta Southern 87, cb Geneva 89, Newton.
Oates, Joshua Camillus, mc univ Tennessee 98, state board 98 Pinckard.
Scott, Marcus Tullius Cicero, mc Birmingham 97, cb Henry 97, Clopton.
Smisson, Henry James, mc South Carolina 60, cb 87, Wicksburg.
Spears, Phillip Benton, mc Georgia Reform 91, cb 91, Pinckard.
Weed, Samuel LaFayette, mc Alabama 85, cb 87, Ariosto.
Total, 11.

Moved into the county—Benjamin Franklin Coleman, from Florida to Ozark

Moved out of the county—Albert Sidney Steagall, from Clopton to Abbeville, Henry county.

Examinations—William Daniel Mixson, mc Chattanoga 98, certificate granted.

Death—John R. Rice, mc Alabama (one course), cb Geneva 87, Wicksburg.

DALLAS COUNTY MEDICAL SOCIETY—Montgomery, 1875.

OFFICERS.

President, C. Ritter; Vice-President, J. M. Donald; Secretary, B. B. Rogan; Treasurer, S. Kirkpatrick; Health Officer, S. G. Gay. Censors—J. P. Furniss, E. B. Ward, C. Ritter, S. G. Gay, J. M Donald.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Adams, Benjamin Clarence, mc Alabama 72, cb 78, Safford.
Chapman, John Thomas, mc Alabama 86, cb Marengo 87, Selma.

Chisolm, Robert Patrick, mc Alabama 93, cb 93, Summerfield.
Cochrane, Robert Miller, mc univ Virginia 65, cb 78, Eleanor.
Donald, James Marion, mc Alabama 84, cb 84, Bridges.
Donald, Joseph Marion, mc univ Louisiana 54, cb 78, Howell.
DuBose, Frank Goodwin, mc univ Tulane 93, cb Talladega 93, Selma.
Edwards, Daniel B., mc Alabama 98, cb 98, Polk.
Furniss, John Perkins, mc univ New Orleans 66, cb 78, Selma.
Gay, Samuel Gilbert, mc Alabama 87, cb 87, Selma.
Groves, Joseph Asbury, mc South Carolina 54, cb 78, Orrville.
Harper, William Wade, mc univ Tulane 91, cb 91, Selma.
Howard, Thomas Greenwood, mc univ Washington 68, cb Autauga 78, Selma.
Kendall William Quinton, mc phy and surg Baltimore 80, cb 80, Berlin.
King, Goldsby, mc South Carolina 80, cb 80, Selma.
Kirkpatrick, Samuel, mc univ Vanderbilt 88, cb 88, Selma.
Lockhart, Thomas Ernest, mc univ Tulane 90, cb Perry 90, Selma.
McKinnon, John Alexander, mc univ Louisiana 67, cb 78, Selma.
Moore, John Thomas, mc Alabama 91, cb 91, Orrville.
Pitts, William McLean, mc Louisville 94, cb 94, Selma.
Phillips, William Crawford, mc univ Louisiana 73, cb 78, Vallegrande.
Ritter, Clement, mc Jefferson 90, cb DeKalb 90, Selma.
Rogan, Barney Burns, mc Grant 96, cb 96, Selma.
Sutton, Robert Lee, mc univ Columbia 89, cb Lee 89, Orrville.
Taylor, William Henry, mc Alabama 87, cb Marengo 87, Central Mills.
Ward, Edward Burton, mc univ New York 82, cb Hale 82, Selma.
Weisinger, John Alonzo, mc Alabama 98, cb 98, Polk.
Total, 27.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Allison, Joseph D., mc South Carolina 78, cb 78, Carlowville.
Allison, Samuel Blakeman, mc Louisville 91, cb 93, Carlowville.
Boykin, Joseph Owen, mc univ Transylvania 43, cb 78, Tilden.
Burwell, Lincoln Laconia, (col'd) mc Leonard, N. C. 89, cb Montgomery 89, Selma.
Hall, John James, mc univ Louisiana 67, cb 78, Selma.
Kyser, George Washington, mc Richmond 65, cb 78, Richmond.
Kyser, James H., mc univ Tulane 97, cb 97, Richmond.
McKinnon, Kenneth, mc univ Louisville 52, cb 78, Pleasant Hill.
Mixon, William S., mc univ Louisiana 49, cb 78, Plantersville.
Moseley, Elijah Bucklee, mc univ Louisiana 57, cb 78, Boguechitto.
Pugh, Braxton Bragg, mc Alabama 89, cb Clarke 89, Browns.
Pegues, Charles Ives, mc univ Tulane —, cb 96, Safford.
Riggs, Watt, mc ——, cb ——, Pleasant Hill.
Sellers, W. I., mc ——, cb ——, Browns.

Snow, Joseph Lewis, mc Alabama 91, cb Lowndes 91, Burnsville.
Stewart, William Champney, mc South Carolina 58, cb 78, Soap Stone.
Stewart, William Whitman, mc ———, cb —, Berlin.
Total, 17.

Moved into the county—Edwin M. Sellers, from Randolph, Bibb county to Selma.

Moved out of the county—Edwin M. Sellers, from Selma to Brookwood, Tuscaloosa county.

Examinations—Daniel B. Edwards, mc Alabama 98, certificate granted.

DeKALB COUNTY MEDICAL SOCIETY.—Greenville, 1885.

OFFICERS.

President, W. I. Wright; Vice-President, A. J. Farley; Secretary, W.E. Quin; Treasurer, H.P. McWhorter; Health Officer, E. P. Nicholson. Censors—W. E. Quin, W. S. Duff, H. P. McWhorter, E. P. Nicholson, T. H. Appleton.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Appleton, Thomas Hayne, mc Chattanooga 92, cb 92, Collinsville.
Black, John Hugh, mc Georgia Eclectic 93, cb 93, Halford.
Duff, William Sayers, mc Alabama 89, cb 90, Fort Payne.
Farley, Andrew Jackson, mc Atlanta 90, cb Shelby 90, Collinsville.
Killian, Henry Elliott, ng, cb 89, Brandon.
McWhorter, Horace Puckett, mc univ Vanderbilt 81, cb 85, Collinsville.
Miller, James Taylor, mc univ Vanderbilt 78, cb 85, Collinsville.
Moore, Wiley Evan, mc Atlanta 90, cb Shelby 90, Lebanon.
Nicholson, Edward Pierson, mc univ Nashville 61, cb 85, Valley Head.
Quin, William Everett, mc s of m Kentucky 81, cb 85, Fort Payne.
Sherman, James Richard, mc Georgia Eclectic 89, cb Marshall 89, Sand Mountain.
Smith, Samuel Parish, mc s of m Kentucky 89, cb, 89, Crossville.
Wright, Charles Wesley, mc Alabama 93, cb 93, Grove Oak.
Wright, William Ira, mc univ Vanderbilt 90, cb 91, Dawson.
Total, 14.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Bailey, Alexander Henry, ng, cb 89, Fort Payne.
Green, Philemon Buel, mc univ Vanderbilt 76, cb 85, Sulphur Springs.
Green, William Mastin, mc univ Vanderbilt 77, cb 85, Fort Payne.
Harrison, Joseph J, mc univ Vanderbilt 93, cb 93, Geraldine.
Hall, John Deckard, mc Southern 92, cb 97, Chavies.
Howard, Joshua Elijah, mc univ Tennessee 86, cb 95, Henegar.

Howard, Isaac William, mc Memphis 98, cb 99, Sulphur Springs.
Winston, John Nelson, mc univ Louisville 66, cb 85, Valley Head.
Wooten, William James, ng, cb 89, Musgrove.
Wyett, J. J., ng, cb 89, Geraldine.
Total, 10.

Examinations—Isaac William Howard, mc Memphis 98, certificate granted.

Deaths—William Addison Elrod, ng, South Hill.

ELMORE COUNTY MEDICAL SOCIETY—Birmingham, 1877.

OFFICERS.

President, J. A. Howle; Vice-President, W. M. Gamble; Secretary, J. W. Dorough; Treasurer, J. W. Dorough; Health Officer, W .A. Warren. Censors—O. S. Justice, W. A. Warren, J. W. Sewell, S O. Humphries, J. T. Rushin.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Blake, Wyatt Heflin, mc univ Vanderbilt 84, cb Randolph 87, Wetumpka.
Dorough, John William, mc Atlanta 94, cb 94, Tallassee.
Estes, Mordecia John Elliott, mc Atlanta 95, cb Chilton 95, Deatsville.
Fitzpatrick, Philip, mc univ Tulane 63, cb 84, Wetumpka.
Gamble, William Melvine, mc univ Louisville 87, cb Jefferson 87, Wetumpka.
Hill, Robert McCollough, mc Alabama 94, cb 96, Ware.
Howle, James Augustus, mc Alabama 90, cb 90, Eclectic.
Huddleston, William Allen, mc Atlanta 80, cb 84, Wetumpka.
Humphries, S. Oceola, mc Jefferson 85, cb 85, Elmore
Judkins, George Bernard, mc Jefferson 59, cb Macon 79, Wetumpka.
Jowers, Sol Franklin, mc Atlanta 85, cb 85, Kowaliga.
Justice, Oscar Suttle, mc Alabama 85, cb 85, Central.
Robinson, Edwin Hunt, mc univ Pennsylvania 52, cb 84, Robinson Springs.
Sewell, Jabez Wesley, mc Alabama 90, cb 90, Titus.
Sewell, Neal Baker, mc univ Vanderbilt 86, cb 86, Buyck.
Warren, William Allen, mc Alabama 85, cb 85, Wetumpka.
Total, 16.

PHYSICANS NOT MEMBERS OF THE SOCIETY.

Beckett, Thomas Travis, mc univ Tulane 59, cb 84, Titus.
Boddie, Henry B. illegal, Tallassee.
Campbell, Archie Graham, ng, cb 84, Tallassee.
Garrett, Allen, Jefferson, mc Alabama 93, cb 93, Kent.
Lett, Harrison Templeton, mc univ Tulane 75, cb 84, Good Hope.
Nix, James Ringold, mc South Carolina 67, cb 84, Deatsville.
Powell, James Robert, mc Graffenburg 65, cb 84, (Retired) Tallassee.

Powell, Abel Anderson, mc Atlanta Southern 92, (Retired) Tallassee.
Total, 8.

Moved into the county—Robert L. Huddleston, from Wadsworth, Autauga county to Speigners.

Deaths—Abner Norton, mc Alabama 88, cb 88, Eclectic, of pneumonia

ESCAMBIA COUNTY MEDICAL SOCIETY—Greenville, 1885.

OFFICERS.

President, S. C. Henderson; Vice President, H. H. Malone; Secretary, Mason Foshee; Treasurer, Mason Foshee, Health Officer, E. T. Parker. Censors—H. H. Malone, P. H. M. Tippin, W. L. Abernathy, Mason Foshee, E. T. Parker.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Abernathy, William L. mc Alabama 94, cb Monroe 94, Flomaton.
Foshee, Mason, mc univ Virginia 96, cb 96, Brewton.
Henderson, Stephen Cary, mc Alabama 87, cb 87, Brewton.
Malone, Henry Holcombe, mc univ New York 60, cb 86, Brewton.
Martin, John Elijah, mc Alabama 75, cb Bullock 79, Brewton.
Owens, Jared Durwood, mc Alabama 79, cb Butler 79, Pollard.
Parker, Edwin Theodore, mc univ Tulane 91, cb 91, Brewton.
Smith, Price Hall, mc Alabama 94, cb 95, Brewton.
Tippin, Philip Henry Mulcahy, mc Alabama 94, cb 94, Brewton.
Total, 9.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

McLendon, Lewis Marshall, mc Alabama 74, cb Butler 84. Brewton.
Christian,—— —mc——cb— Jack Springs.
Webb, mc—— —cb—— —Atmore.
Foard, J. T. B., mc—— —cb—— —Pollard.

Illegal Practitioners.

Grice, John, Boykin.
Moore, Charles L., Atmore.
Roberts, J. M., Bradley's Dam.
Ferguson, ———, Brewton.
Total, 8.

Moved into the county—Dr. Christian to Jack Springs; Dr. Webb, to Atmore

Moved out of the county—J. A. Wilkinson, from Flomaton to Montgomery; J. F. Peavy, from Atmore to Ashville, North Carolina.

ETOWAH COUNTY MEDICAL SOCIETY—1878.

OFFICERS.

President, E. T. Camp; Vice President, J. W. Lawrence; Secretary, R. F. McConnell; Treasurer, W. S. Edwards; Health Officer, E. T. Camp. Censors—E. S. Jones, R. F. McConnell, F. P. Sanders, J. W. Lawrence, J. P. Stewart.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Acton, W, H., mc Alabama 86, cb Jefferson 86, Alabama City.
Blackshear, Randall Davis, mc s of m Kentucky 92, cb Dale 94, Gadsden.
Baskins, Herschel V, mc —, cb 98, Coats Bend.
Camp, Erasmus Taylor, mc Alabama 85, cb Cleburne 85, Gadsden.
Edwards, William Sterling, mc s of m Kentucky 85, cb Cleburne 85, Gadsden.
Ford, Willie Franklin, mc univ Vanderbilt 95, cb 95, Hoke's Bluff.
Jones, Eli Spears, mc Alabama 83, cb Jefferson 83, Gadsden.
Lawrence, George Washington Dougherty, mc univ Nashville 86, cb 86, Turkeytown.
Landers, Franklin Pierce, mc Atlanta 73, cb 84, Hoke's Bluff.
Lidell, John Benson, mc Atlanta 82, cb 82 Gadsden.
McConnell, Robert Franklin, mc Atlanta Southern 81, cb St. Clair 81, Attalla.
Wood, James Harding, mc univ Vanderbilt 82, cb 82, Attalla.
Total, 12.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Anderson, Robert Bailey, mc Atlanta Southern 88, cb 88, Walnut Grove.
Baker, Daniel Harris, mc univ Nashville 82, cb Macon 82, Gadsden.
Coggins, William Thomas, mc ——, cb 77, Keener.
Dowdy, Edgar Lee, mc univ Vanderbilt 76, cb 79, Keener.
Dozier, Marshall Elias, mc Atlanta 61, cb 78, Mountainboro.
Ellison, John Henry, mc univ Vanderbilt 88, cb 89, Walnut Grove.
Funderburg, William Lewis, mc Atlanta Southern 82, cb DeKalb 86, Gadsden.
Gilliland, Henry Forney, mc univ Louisville 90, registered diploma 90, Hill.
Hurst, James A., mc Alabama 91, cb 91, Walnut Grove.
Morgan, George W., mc univ Nashville 89, cb 89, Keener.
Ralls, John Perkins, mc Georgia 44, cb 78, Gadsden.
Slaughter, Charles Jefferson, mc ———, cb 81, Aurora.
Stewart, John Pope, mc Alabama 86, cb 86, Attalla.

Wilson, George Washington, mc Alabama 95, cb 96 Attalla.
Wright, Milton Royal, mc Alabama 78, cb 78, Gadsden.
Total, 15.

FAYETTE COUNTY MEDICAL SOCIETY—Selma, 1879.

OFFICERS.

President, T. M. Peters; Vice-President, M. R. Seay; Secretary, W. A. Graham; Treasurer, W. A. Graham; Health Officer, M. R. Seay. Censors—M. R. Seay, W. A. Graham, Victor Savage, J. D. Young, J. G. Smith.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Graham, William Alexander, mc Louisville 92, cb 92, Fayette.
Hollis, Jonathan Shelton, mc Alabama 81, cb 81, Covin.
Jones, William Wilburn, old law, 58, cb 84, Newtonville.
Peters, Thomas Marion, mc Alabama 90, cb 90, Fayette.
Seay, Mark Rollins, old law, 76, cb Lamar 86, Berry Station.
Smith, John Gardner, mc Alabama 89, cb Lamar 89, Bankston.
Savage, Victor, mc univ Vanderbilt 89, cb 89, Pilgrim.
Young, James Dapsie, mc Memphis Hospital 94, cb Lamar 94, Fayette.
Total, 8.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Hocut, Lucius Thornton, mc Atlanta 58, cb 83, Davis Creek.
Lane, Henry Bascom, (illegal), mc Atlanta 95, Berry Station.
Lane, Jesse Washington, mc univ Vanderbilt 86, cb Walker 86, New River.
Wheeler, Cicero W., ng, cb Walker 90, Spencer.
Total, 4.

Moved out of the county—John F. Randolph, to Pickens county; W. M. Mackey, to Tuscaloosa county; W. J. McCrary, to Guin, Marion county.

Examinations—John F. Randolph, mc Memphis Hospital 98, certificate granted; W. M. Mackey, mc Memphis Hospital 97, certificate granted.

FRANKLIN COUNTY MEDICAL SOCIETY—Tuscaloosa, 1887.

OFFICERS.

President, J. M. Clark; Vice-President, W. W. White; Secretary, W. J. Clark; Treasurer, W. J. Clark; Health Officer, L W. Desprez. Censors—L. W. Desprez, N. T. Underwood, J. A. Trimble, O. Sargent, E. M. Harris.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Barnes, Thomas Benton, mc Memphis 74, cb 88, Darlington.
Clarke, John King, Sr., mc univ Nashville 56, cb 88, Russellville.
Clarke, John King, Jr., mc univ Vanderbilt 84, cb 88, Belgreen.
Clark, John McWhorter, mc univ Louisville 50, cb Lawrence 88, Russellville.
Clark, William Josiah, mc Birmingham 96, cb 96, Russellville.
Cleere, William Washington, mc univ Nashville 82, cb 88, Belgreen.
Desprez, Louis Willoughby, mc Alabama 71, cb 88, Russellville.
Harris, Elijah McCulloch, mc univ Vanderbilt 87. cb 87, Russellville.
Hughes, ——, mc ———, cb ———, Pleasant Site.
Jones, Thomas Speck, mc univ Vanderbilt 78, cb 88, Russellville.
Lee, ———, mc ———, cb ———, Red Bay.
Nance, James W., mc Baltimore 94, cb —, Russellville.
Sargent, Oscar, mc univ Vanderbilt 80, cb 88, Darlington.
Trimble, Joseph Adison, mc Vanderbilt 81, cb —, Russsellville.
Underwood, Nimrod Terrell, mc Alabama 86, cb 88, Russellville.
White, William Wyatt, mc s of m Kentucky 85, cb Marion 85, Newburg.
White, Robert Josiah, mc Louisville 54, cb 88, Burleson.
Total, 17.

PHYSICIANS NOT MEMBERS OF THE SOCIETY

Sevier, Daniel Vertner, mc —, cb —, Russellville.
Total, 1.

Moved into the county—James W. Nance, from Texas to Russellville.

Moved out of the county—Paul Ray Jones, from Frankfort to Mississippi.

Examinations—Dr. Hughes, Pleasant Site.

GENEVA COUNTY MEDICAL SOCIETY—Montgomery, 1888.

OFFICERS.

President, M. F. Fleming; Vice-President, J. H. Ard; Secretary, A. B. Jernigan; Treasurer, A. B. Jernigan; Health Officer, W. H. Chapman. Censors—J. H. Ard, J. C. Fleming, R. L. Justice, A. R. Chapman, W. H. Chapman.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Ard, James Henry, mc ———, 88, cb 88, Geneva.
Chapman, Abner Richard, mc univ Vanderbilt 88, cb 88, Coffee, Geneva.
Chapman, William Hickerman, mc Alabama 73, cb Coffee 81, Geneva.
Cox, William, mc ——— —, cb 88, Dundee.

Chalker, William Pounce, mc Georgia Eclectic 97, cb 97, Sanders.
Clements, John N., mc Jefferson 56, cb 88, Elton,
Douglass, Silas William, mc ——— —, cb Escambia 88, Eunola.
Fleming, John Clifton, mc Alabama 91, cb 95, Hartford.
Fleming, Millard Filmore, mc Louisville 90, cb 88, Geneva.
Hooten, William Arrington, mc Atlanta 95, cb Henry 95, Hartford.
Jernigan, Alpheus Baker, mc —— —, cb 88, Geneva.
Justice, Robert Lee, mc Alabama 94, cb Pike 94, Geneva.
Rivenbark, Jackson J., mc Georgia Eclectic 97, cb Dale 97, Hartford.
Smith, Gordon Wright, mc univ Louisville 92, cb 92, Big Creek.
Total, 14.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Holly, John H., mc Alabama 98, cb 98, Marl.
Hundley, Asbury C., mc Louisiana 87, cb Escambia 87, Geneva.
Shutes, Joseph V., mc —— —, cb 88, Lupton.
Treadwell, Hardy P., mc Georgia Eclectic 93, cb 88, Geneva.
Ward, Thomas Jefferson, mc —— —, cb 88, Wadford.
Total, 5.

Moved into the county—A. C. Hundley, from Dothan, Henry county to Geneva.

Examinations—John H. Holly, certificate granted.

*GREENE COUNTY MEDICAL SOCIETY—Selma, 1878.

OFFICERS.

President, J. P. Barclay; Vice-President, A. H. Byrd; Secretary, W. R. Hatter; Treasurer, W. R. Hatter; Health Officer, ———. Censors—A. M. Duncan, R. D. Lucius, S S. Murphy D. O. McGhee, A. P. Smith.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Barclay, James Paxton, mc univ New York 71, cb 79, Eutaw
Byrd, Alexander Hamilton, mc univ New York 69, cb 80, Eutaw.
Duncan, Augustus Meek, mc Alabama 74, cb 79, West Greene.
Gunter, John Leon, mc Memphis 94, cb Pickens 95, Eutaw.
Harkness, William Baskin, mc Alabama 97, cb 97, Boligee.
Hatter, William Reuben, mc univ Tulane 89, cb 89, Boligee.
Hagler, John Wiley, mc Alabama 94, cb Tuscaloosa 94, Clinton.
Legare, Julius Kenneth, mc univ New York 86, cb 87, Forkland.
Lucius, Richard DeKalb, mc Alabama 71, cb Tuscaloosa 78, Eutaw
McGehee, Dabney Oswell, mc Alabama 72, cb 79, Eutaw.
Moore, George Augustus, mc Alabama 90, cb 90, Clinton.
Murphy, Samuel Silenus, mc Alabama 81, cb 84, Pleasant Ridge.

Pierce, Thomas William, mc univ Virginia 75, cb 79, Knoxville.
Smith, Armand Pfister, mc s of m Kentucky 75, cb 79, Eutaw.
Smith, John Alexander, mc Atlanta 58. cb 79, Union.
Snoddy, Virgil, mc Alabama 73, cb 79, Knoxville.
Total, 16.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Morgan, Isaac DuBose, mc univ Pennsylvania 58, cb 79, Eutaw.
Mobley, W. A., mc Alabama —, cb —, West Greene.
Pearson, Edward Pallen, mc univ Louisville 73, cb 84, McAlpine.
Purnell, James Knox, mc —— —, cb Pickens 88, Lewiston.
Snoddy, Samuel, mc univ Transylvania 31, cb 79, Mantua.
Total, 5.

*NOTE.—As no report has been received from Greene county this year, the report for 1898, is here reproduced.

HALE COUNTY MEDICAL SOCIETY—Montgomery, 1875.

OFFICERS.

President, Jacob Huggins; Vice-President, D. J, Castleman; Secretary, D. J. Castleman; Treasurer, D. J. Castleman; Health Officer, Jacob Huggins. Censors—E. P. McCullom, R. H. Duggar, D. J. Castleman, W. T. Downey, J. Huggins.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Borden James Pennington, mc univ Southern 75, cb 78. Greensboro.
Castleman, David J., mc univ Tulane 96, cb 96, Greensboro.
Davis, Andrew Rufus, mc Atlanta, 90, cb 90, Five Mile.
Driver, Elisha Newton, mc univ Louisiana 93, cb Perry 93, Newbern.
Downey, W. T., ——— —, ——— —, Greensboro.
Duggar, Reuben Henry, mc univ Pennsylvania 58, cb 78, Gallion.
Griffin, Rufus Jackson, mc Alabama 90, cb 90, Moundville.
Huggins, Jacob, mc univ Pennsylvania 60, cb 78, Newbern.
Leonard, Madison Waldo, mc Alabama 94, cb Shelby 94, Cedarville.
McCullom, Edgar Patton, mc Alabama 93, cb Perry 93, Greensboro.
Ray, Jacob Ursa, Jr., mc Tennessee 93, cb Bibb 93, Greensboro.
Spencer, George M., ng, old law 78, cb Tuscaloosa 78, Brush Creek.
Tidmore, James Adams, mc univ Kansas City 84, cb 98, Havana.
Total. 13.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Carson, Shelby Chadwick, mc Tulane 74, cb Greene 79, Greensboro.
Gallion, Thomas F., mc Louisville 95, cb Marengo —, Gallion.
Gewin, William Christopher, mc univ Louisiana 78, cb 78, Akron.
Total, 3.

Moved into the county—Shelby ChadwickCarson, from Jefferson county to Greensboro; Madison Waldo Leonard, from Perry county to Cedarville; Jacob Ursa Ray, Jr., from Bibb county to Greensboro.

Moved out of the county—Clarence Henderson Long, from Greensboro to U. S. Army; Edward W. Peterson, from Greensboro to New York.

Deaths—William Harrison Owens, (should have been reported last year) Havana; Elisha Young, mc univ Jefferson 59, cb 78, Greensboro, Nov. 6, 1898, of heart disease.

HENRY COUNTY MEDICAL SOCIETY—Birmingham, 1883.

OFFICERS.

President, J. R. G. Howell; Vice-President. W. M. Ryals; Secretary, S. O. Carlisle; Treasurer, H. P. Calhoun; Health Officer, W. M. Ryals. Censors—F. I. Moody, G. A. Hammond, J. R. G. Howell, W. J. Lee, J. H. Stovall.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Atkeson, Clarence Lee Crawford, mc phys and surg Baltimore 84, cb Lee 86, Columbia.
Carlisle, Samuel Oscar, mc univ Vanderbilt 94, cb Pike 94, Dothan.
Calhoun, Henry P., mc Atlanta 95, cb 95, Cottonwood.
Ellis, J. L., mc Memphis Hospital 86, cb Dale 86, Dothan.
Fleming, P. F., mc Louisville 94, cb Coffee 94, Dothan.
Hardwick, William Pleasant, mc Alabama 87, cb 88, Headland.
Hendrix, Leonidas, mc Atlanta 90, cb Pike 90, Abbeville.
Hammond, George Abner, mc phys and surg Baltimore 84, cb 84, Dothan.
Howell, John Robert Graves, mc Atlanta 90, cb Dale 88, Dothan.
Lee, William Joseph, mc univ Louisiana 60, cb 83, Abbeville.
Lee, J. E., mc Atlanta 95, cb 97, Gordon.
Moody, Fleming Isaac, mc phys and surg Baltimore 76, cb 83, Dothan.
Pate, Walter Eugenius, mc Atlanta 93, cb 95, Ashford.
Phillips, Bernard, mc univ Heidelberg, Germany 74, cb Henry 91,
Ryals, William M., mc Atlanta 87, cb 95, Cowarts.
Stovall, John Henry, mc Atlanta 60, cb 91, Columbia.
Twitty, Frank Stewart, mc phys and surg Baltimore 93, bc 95, Columbia.
Vaughn, Daniel Horatio, mc Atlanta 88, cb 89, Gordon.
Williams, William Henry, mc Memphis Hospital 89, cb 89, Dothan.
Yarbrough, John Fletcher, mc Atlanta, 92, cb 92, Columbia.
Young, Harvey Monroe, mc Alabama 93, cb 93, Dothan.
Dothan.
Total, 21.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Blackledge, John Richard, mc Alabama 89, cb 91, Abbeville.
Chalker, ——, mc Eclectic — (illegal), Ashford.
Fowler, James Thomas, mc South Carolina 81, cb 84, Shorterville.
Fowler, John Lindsey, mc South Carolina 51, cb 83, Shorterville.
Hill, A. S., mc Atlanta, no certificate, Gordon.
Fillingane, W. H., (illegal), Ashford.
Lewis, James Langdon, mc Atlanta 84, cb 85, Bush.
Long, James Benjamin, mc Louisville 81, cb 83, Abbeville.
McElvane, Ples, ng (illegal), Ashford.
Oats, Wyatt Stephen, mc ——, cb 91, Headland.
Stokes, James Eldridge, mc Eclectic 92, cb 97, Kinsey.
Weems, J. S., mc Alabama 93 (illegal), Lawrenceville.
Sporman, C. F., mc Alabama 87, cb 89, Headland.
Stapleton, R. B., mc Louisiana 85, cb 91, Dothan.
Total, 14.

Moved into the county—J. L. Ellis, from Louisville, Barbour county, to Dothan,; A. S. Steagall, Jr., from Clopton, Dale county, to Abbeville; W. C. Steagall, from Ozark, Dale county, to Abbeville; P. T. Fleming, from Clintonville, Coffee county, to Dothan.

Moved out of the county——Blackshire, from Brown's X Roads to Fort Gaines, Ga.; A. C. Hundley, from Dothan to Geneva, Geneva county.

JACKSON COUNTY MEDICAL SOCIETY—Mobile, 1882.

OFFICERS.

President, W. L. McClendon; Vice-President, T. E. Callan; Secretary, Andrew Boyd; Treasurer, James P. Rorex; Health Officer, E. R. Smith. Censors—J. W. Knowlton, E. R. Smith, W. C. Sanders, W. C. Maples, G. W. Foster.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Blakemore, Andrew M., mc univ Tennessee 80, cb 82, Larkinsville.
Boyd, Andrew, mc phy and surg Baltimore 88, cb 88, Scottsboro.
Boggess, John W, mc Vanderbilt 92, cb Marshall 93, Woodville.
Callan, Thomas E, mc Alabama 94, cb DeKalb 94, Fackler.
Foster, George W, mc Nashville 82, cb 82, Stevenson.
Hayes, George T, mc Atlanta 89, cb DeKalb 89, Hollywood.
Knowlton, James W, mc univ Vanderbilt 83, cb 83, Paint Rock.
Maples, William C, mc univ Tennessee 81, cb Madison 81, Scottsboro.
McLendon, William L, mc univ Alabama 94, cb 94, Hollywood.
Rorex, James Polk, mc Alabama 75, cb 82, Scottsboro.
Sanders, Walter C, mc Memphis 91, cb Madison 91, Stevenson.
Smith, Eugene R, mc univ Vanderbilt 85, cb 89, Dutton.
Total, 12.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Adkins, Charles William, mc Louisville 68, cb 84 Langston.
Brewer, Joseph M, mc univ Vanderbilt 82, cb 82, Trenton.
Gettes, Henry Franklin, ng, cb 82, Holly Tree.
Grant, Felix, ng, cb 82, Larkins.
Harralson, Jefferson B., mc Memphis 87, cb DeKalb 88, Langston.
Helton, Thomas H., ng, cb 82, Caffey's Store.
James, William, mc univ Vanderbilt 82, cb 90, Bolivar.
Johnston, James Robert, ng, cb DeKalb 82, Kirby's Creek.
Lee, Elisha L., mc univ Vanderbilt 73, cb 82, Bridgeport.
Moon, Emmett K., mc Chattanooga 92, cb Marshall 93, Bridgeport.
Mason, William, mc univ Transylvania 46, cb 82, Fabius.
McAfee, Green Pryor, ng, cb 82, Lime Rock.
McCord, John Harvey, ng, cb 82, Section.
Reid, James R., mc Alabama 93, cb 93 Estills.
Smith, Barton Brown, Sr., mc Nashville 67, cb 83, Larkinsville.
Smith, William Barton, ng, cb 82, Aspel.
Spiller, William Kingston, mc Louisville 74, cb 84, Bridgeport.
Tate, George T, mc univ Vanderbilt 95, cb Marshall, 96, Fabius.
Zurmehly, Samuel Lutz, mc Miami 90, cb 90 Bridgeport.
Total, 19.

Examinations—W. C. Leary, mc Atlanta —, Huntsville, certificate refused; Walter C. Rosser, Stevenson, mc univ Vanderbilt, certificate granted.

Deaths—James Harvey Boyd, mc univ Tennessee 67, January 31, 1899, Scottsboro, of croupous pneumonia. LaFayette Derrick, ng, July 6th, 1898, Woodville, of tuberculosis. David Kirby Langston, acute gastritis. M. Graham Stephenson, killed by cars. T. M. Arnold, Pisgah, of heart disease.

JEFFERSON COUNTY MEDICAL SOCIETY—Birmingham, 1887.

OFFICERS.

President, G. S. Brown; Vice-President, J. W. Hirst; Secretary, G. C. Chapman; Treasurer, R. V. Mobley; Health Officer, J. W. Barclay. Censors—E. H. Sholl, L. G. Woodson, Cunningham Wilson, E. P. Riggs, S. L. Ledbetter.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Abernathy, Jones Cadwalader, mc univ Louisiana 59, cb Marengo 78, Birmingham.
Alexander, Howard Augustus, mc s of m Kentucky 75, cb Macon 78, Birmingham.
Bankston, Richard Coopender, mc univ Tulane 88, cb 96, Birmingham.

Barclay, John Wyeth, mc Jefferson 69, cb Madison 78, Birmingham.
Barrett, Nathaniel Aldridge, mc univ Vanderbilt 86, cb Lauderdale, 86, East Lake.
Berry, Robert Alford, mc univ Virginia 82, cb 85, Birmingham.
Borden, Benjamin Franklin, mc univ Vanderbilt 90, cb Walker 98, Blossburg.
Brown, George Summers, mc Jefferson 85, cb 87, Birmingham.
Brown, George Washington, mc Atlanta 77, cb 78, Pratt City.
Brown, Thomas Jefferson, mc univ Virginia 85, cb 85, Pratt City.
Caffee, Samuel Richmond, mc univ Missouri 81, cb Tuscaloosa 81, Birmingham.
Carter, James Watson, mc univ Nashville 74, cb Limestone 78, Bessemer.
Chapman, George Clarence, mc univ Vanderbilt 90, cb Monroe 90, Birmingham.
Clark, Nat G., mc Birmingham 96, cb 98, Pratt City.
Copeland, Benjamin Grigsby, mc Jefferson 83, cb Limestone 83, Birmingham.
Cotten, Robert, mc univ Tulane 67, cb 86, Birmingham.
Coulbourne, Joseph Thomas, mc univ Maryland 86, state board 86, Birmingham.
Cunningham, Russell McWhorter, mc Bellevue 79, cb 83, Pratt City.
Davis, John Daniel Sinkler, mc Georgia 79, cb St. Clair 79, Birmingham.
Davis, William Elias Brownlee, mc Bellevue 84, cb 84, Birmingham.
Dedman, J. E., mc univ Tennessee, cb Jefferson 98, Birmingham.
Drennen, Charles, mc Alabama 72, cb Blount 78, Birmingham.
Drennen, Daniel Edward, mc Alabama 94, cb 94, Birmingham.
Due, Malvern Nicholas, mc phy and surg New York 89, cb Montgomery 88, Birmingham.
Duncan, Joseph Johnston, mc univ Louisville 86, state board 86, Birmingham.
Dunlap, Perry Gabriel, mc univ Vanderbilt 81, cb St. Clair 81, Adger.
Edwards, Joseph, mc Birmingham med 97, cb 97, Wylam.
Fox, Bertram Arthur, mc Birmingham med 96, cb 96, Birmingham.
Gibson, Jefferson Demetrius, mc Alabama 87, cb Tuscaloosa 87, Birmingham.
Glass, Edward Taylor, mc univ Vanderbilt 90, cb 90, Birmingham.
Hamrick, Robert Hampton, mc Atlanta 95, cb Blount 96, Pratt City.
Hardin, E. Burke, mc univ Louisville 96, cb 96, Dolomite.
Hawkins, Richard Nathaniel, mc Miami, Ohio 67, cb Shelby 87, Birmingham.
Hawkins, Joseph Povis, mc univ Tulane 82, cb 82, Avondale.
Harwell, James Thomas, mc Atlanta Southern 83, cb Cullman 83, Ishkooda.

Heacock, Joseph Davis, mc univ Tulane 92, cb Talladega 92, East Lake.

Heflin, Wyatt, mc Jefferson 84, cb Randolph 85, Birmingham.

Heflin, Howard Towles, mc univ Maryland 93, cb Clay 94, Bessemer.

Henley, Albert Thomas, mc univ New York 69, cb Hale 78, Birmingham.

Hirst, Jesse Watson, mc Jefferson 83, cb 95, Thomas.

Howard, John Wesley, mc Atlanta 91, cb Shelby 91, Irondale.

Hogan, George Archibald, mc Birmingham 96, cb, Jefferson 96, Birmingham.

Jenkins, Luckie Andrew, mc Alabama 89, cb Wilcox 89, Cardiff.

Jernigan, Charles Henry, mc Jefferson 55, cb Bullock 80, Birmingham.

Johnston, Hardee, mc univ Virginia 95, cb 96, Birmingham.

Jones, Capers Capehart, mc univ med and surg, Philadelphia 70, cb Wilcox 79, East Lake.

James, Devotie Davis, mc univ Maryland 72, cb Lowndes 72, Woodlawn.

Jordan, William Mudd, mc phy and surg New York 95, cb 98, Birmingham.

Killough, James Monroe, mc s of m Kentucky 87, cb 87, Huffman.

Klebs, Theodore Alexander, mc Tulane 76, cb 87, Birmingham.

Lacy, Edward Parish, mc univ Vanderbilt 83, cb Shelby 83, Bessemer.

Ledbetter, Samuel Leonidas, mc univ Louisville 79, cb 79, Birmingham.

Lewis, Francis Porcher, mc South Carolina 76, cb 80, Coalburg.

Lewis, James Marshall, mc univ Vanderbilt 87, cb 88, Birmingham.

Luckie, James Buckner, mc univ Pennsylvania 55, cb 78, Birmingham.

LeGrand, John Clarke, mc Atlanta 80, cb 81, Birmingham.

Martin, Henry Lewis, mc univ Vanderbilt 81, cb Madison 81, Avondale.

McCarty, James Henry, mc Atlanta 80, cb 83, Birmingham.

Mobley, Robert Vernon, mc Alabama 89, cb Clarke 89, Birmingham.

Moore, John Austin, mc phy and surg Baltimore 85, cb Blount 85, Birmingham.

Morris, Edward Watts, mc univ Virginia 85, cb 87, Birmingham.

Morris, Lewis Coleman, mc univ Virginia 92, cb 93, Birmingham.

Naff, John Mortimer, mc univ Vanderbilt 85, cb 85, Birmingham.

Parke, Thomas Duke, mc univ New York 79, cb Dallas 84, Birmingham.

Payne, John, mc Jefferson 86, cb Shelby 86, Hillman.

Perry, Samuel, mc South Carolina 54, cb Perry 78, Birmingham.

Prince, Francis Marion, mc Jefferson 49, cb 78, Bessemer.

Ransom, William Walter, mc univ Vanderbilt 88, cb 88, Birmingham.

Riggs, Edward Powell, mc phy and surg Baltimore 81, cb Dallas 81, Birmingham

Robertson, Thaddeus Lindley, mc Jefferson 61, cb Calhoun 81, Birmingham.

Robinson, Elisha Milton, mc univ Tulane 85, cb Blount 86, Birmingham.

Robinson, Thomas Franklin, mc univ Nashville 80, cb Blount 80, Bessemer.

Rogers, Mack, mc Alabama 89, cb Conecuh 89, Birmingham.

Rosamond, William Lucius, mc s of m Kentucky 91, cb Walker 91, Warrior.

Rosser, Henry Nollner, mc Atlanta 69, cb Dallas 79, Birmingham.

Sellers, Ira Jackson, mc univ Vanderbilt 97, cb 97, Adamsville.

Sexton, Charles Richard, mc univ Tulane 75, cb Tuscaloosa 78, Birmingham.

Sholl, Edward Henry, mc Pennsylvania, Philadelphia 56, cb Sumter 78, Birmingham.

Stubbs, George Hamilton, mc Atlanta Southern 95, cb 97, Birmingham.

Shoemaker, Worcester Ney, mc Columbus 78 cb 81, Birmingham.

Steeves, Henry Fordyce, ng, state board 87, Gate City.

Tally, Dyer Findley, mc univ Tulane 92, cb 92, Birmingham.

Whaley, Lewis, mc Atlanta 73, cb Blount 78, Birmingham.

Whelan, Charles, mc Alabama 96, cb 96, Birmingham.

Wilder, William Hinton, mc univ New York 91, cb 91, Birmingham.

Wikle, Luther LaFayette, mc univ Tennessee 88, cb 88, Village Springs.

Wilson, Cunningham, mc univ Pennsylvania 84, cb 84, Birmingham.

Winters, Schofield, mc univ Louisville 90, cb 90, Bessemer.

Woodson, Lewis Greene, mc univ Maryland 86, cb 88, Birmingham.

Wood, Winston Cass, mc Atlanta 81, cb 81, Dolomite.

Wyman, Benjamin Leon, mc univ New York and Virginia 78, 79, cb Tuscaloosa 82, Birmingham.

Total, 91.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Acton, William Henser, mc univ Vanderbilt 88, cb Lauderdale 88, Leeds.

Ball, John Calhoun, mc Atlanta 59, cb Calhoun 87, Avondale.

Ballard, Asa Nathaniel, mc Pulte (Homeopathic) 76, cb DeKalb 86, Birmingham.

Berry, James Crawford, mc South Carolina 95, cb 95, Oxmoor.

Blanks, John Harrison, mc univ Tennessee 91, state board 98, Birmingham.

Baker, Dicia Houston, mc Women's Memorial, Cincinnati 98, cb 99, Birmingham.

Bandy, E. C., —— —, cb —, Bessemer.

Benton, John M, mc univ Maryland 90, cb 97, Birmingham.

Brown, Arthur McKinnon (colored), mc Ann Harbor 91, cb 91, Birmingham.

Brown, James Anderson, mc univ Virginia 87, cb Conecuh 87, Ensley City.

Burnum, Henry Clay, mc phy and surg Baltimore 92, cb Blount 93, Chalkville.

Byars, Henry Hayden, mc s of m Kentucky 92, cb Perry 92, Warrior.

Clapp, William Wesley, mc Cleveland (Homeopathic) 90, cb DeKalb 90, Birmingham.

Clayton, Benjamin Lawrence, mc univ Vanderbilt 82, cb St. Clair 83, Ayers.

Collins, James Alexander, mc univ Louisville 91, cb Cullman 91, Warrior.

Cross, Samuel Mardis, mc Georgia 60, cb 78, Woodlawn.

Cross, Thomas Winston, mc univ Nashville 87, cb 87, Bessemer.

Crow, Phillip Patterson, mc univ Nashville 77, cb St. Clair 78, Coalburg.

Davidson, James Francis, mc Alabama 87, cb 87, Birmingham.

Dabney, John Davis, mc univ Washington, Baltimore 72, cb 90, Birmingham.

Dozier, Oliver Thomas, mc Atlanta 74, cb 97, Birmingham.

Edwards, Robert Smith, mc Atlanta 71, cb 78, Trussville.

Ellis, George Washington, ng, cb 78, Morris.

Ellsberry, John Payne, mc univ Virginia 60, cb Montgomery 84, Powderly.

Gamble, John Wesley, (old law) ng, cb 78, Birmingham.

Gillespy, John Sharpe, mc Miami, Ohio 83, cb 83, Birmingham.

Goin, John Burt (colored), mc Meharry 90, cb 90, Birmingham.

Greene, Robert Smith, mc Atlanta 60, cb 78, Greene's Station.

Griggs, John Gardner, mc univ Pennsylvania 63, cb Macon 86, Birmingham.

Hancock, James Francis, mc univ Louisville 88, cb Walker 88, Toadvine.

Hausman, Frank, mc Alabama 93, cb Tuscaloosa 93, Warrior.

Hawkins, Elijah Alexis, mc Atlanta Southern 88, cb Walker 89, Partridge.

Hayes, William Isaac, mc Atlanta Southern 85, cb Walker —, Powderly.

Heddleston, James Lawrence, mc South Carolina 55, cb Hale 87, Woodlawn.

Hill, Charles Lowery, mc univ Tennessee 83, cb 88, Elliott.

Holloway, Young Edwin, mc Miami, Ohio, 72, cb Cullman 85, Birmingham.

Jones, John Columbus, mc univ Tulane 85, cb 88, Johns.

Jones, Robert Arthur, mc univ Louisville 86, cb 86, Birmingham.

Kinette, Jackson Flavius, mc Georgia Eclectic med and surg 92, cb Shelby 92, Brighton.

Lathem, L. Middleton, mc univ Alabama 92, cb Bibb 92, Ensley City.
Lathem, Sinkler Nathaniel, mc Birmingham 98, cb St. Clair 98, Blossburg.
Lewis, G. R., mc ——— —, cb —, Dolomite.
Love, William Jones, mc Alabama 98, cb Morgan 98, Mt. Pinson.
Mason, Ulysses Grant (colored), mc Meharry 95, cb 95, Birmingham.
Means, George Evins, mc univ Tulane 89, cb 94, Bessemer.
Mitchell, R. L., mc ——— —, cb —, Laban.
McClain, Frederic Augustus, mc univ Louisville 94, cb 94, Earnest.
McGlathery, Fountain Scott, mc univ Vanderbilt 82, cb Morgan 82, Woodlawn.
Miller, James Mellville, mc Alabama 84, cb Walker 88, Blossburg.
Miller, James Whitfield, mc univ Vanderbilt 92, cb 92, Wylam.
Oliver, William Marmaduke, mc Alabama 72, cb 78, Jonesboro.
Oliver, Hillary Francis, mc univ Pennsylvania 59, cb Butler 81, Woodlawn.
Ragsdale, Milton Columbus, mc Georgia 78, cb 78, McCalla.
Roberts, Martin (old law), ng, cb 80, Warrior.
Robbins, Jesse Elbert, mc Atlanta 86, cb 86, Brookside.
Robinson, Jasper Bennet, mc univ Vanderbilt 69, cb St. Clair 78, Woodlawn.
Roper, William Elliott, mc univ Louisville 83, cb Shelby 88, Belle Sumter.
Russell, Ralph Morgan, mc Bellvue 88, cb Etowah 89, Birmingham.
Scott, Joseph Newton, mc Alabama 87, cb 87, Birmingham.
Scott, Andrew LaFayette, mc Barnes, St. Louis 96, cb 96, Birmingham.
Shepperd, Lewis Watson, mc phy and surg Baltimore 85, cb St. Clair 89, Bessemer.
Smith, Robert Lee, mc univ Louisville 91, cb —, Toadvine.
Spencer, Lucien Allen, mc Miami, Ohio, 85, cb 85, Bessemer.
Statum, Job Nelson, mc Atlanta Southern 88, cb 88, Blossburg.
Trainer, Edward William, ng, cb Marshall 85, Pratt City.
Tubbs, James, mc Memphis 94, cb Walker 94, Bessemer.
Waldrop, R. W., mc Louisville 96, cb 97, Bessemer.
Washington, Samuel Somerville Hawkins (colored), mc univ Howard 86, cb 87, Birmingham.
Whissenant, Lewis Daniel, ng, cb 78, Morris.
Wilkerson, George Hiram (colored), mc Meharry 97, cb 97, Birmingham.
Total, 70.

Moved into the county—John Harrison Blanks, from Meridian, Miss., to Birmingham; William Dudley Cooper, from Atlanta to Birmingham; James E. Dedman, from Indianapolis, Ind., to Birmingham.

Moved out of the county—Robert Taylor Byrd, from Birmingham to Greene county; Thomas Earle Evins, from Woodward to New York City; Thomas Cecil Hicks, mc Herring (Homeopathic) 95, cb 97, from Birmingham to Blocton; J. T. Miller, from Bessemer to Bibb county; Byron Dozier, mc Barnes 97, (Birmingham certificate refused), from Birmingham to Santiago, Cuba.

Deaths—Ella E. Barnes, June 14th, 98 from operation for hystorectomy; William Condie Forster, Oct. 22, 98, of Bright's disease.

LAMAR COUNTY MEDICAL SOCIETY—Birmingham, 1877.

OFFICERS.

President, J. T. Seay; Vice-President, J. I. Barksdale; Secretary, D. C. Morton; Treasurer, D. C. Morton; Health Officer, W. F. Elliott. Censors—R. J. Redden, G. C. Burns, D. C. Morton, J. C. Buckalew.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Barksdale, James Ira, mc univ Vanderbilt 72, cb Tuscaloosa 86, Fernbank.
Buckalew, Judge C., mc Grant 73, cb Fayette 98, Sulligent.
Burns, George Caruthers, mc Ill. Health University 96, cb 78, Vernon.
Elliott, William Farris, mc univ Louisville (one course) 57, cb 77, Crews.
Harris, John Reed, mc Memphis Hospital 96, cb Jefferson 96, Winfield.
Hollis, Daniel Dixie, mc phy and surg Baltimore (one course) 84, cb 84, Sulligent.
Morton, William Locke, mc univ Louisiana 74, cb 77, Vernon.
Morton, Dick Cameron, mc Memphis Hospital 97, cb 97, Vernon.
Redden, Robert James, mc Baltimore 77, cb 77, Sulligent.
Seay, Jeptha Thomas, ng, cb 77, Fernbank.
Turner, Berry Eddley, mc Memphis Hospital 97, cb 97, Richards.
Woods, Thomas Bailey, mc univ Louisville 73, cb Fayette 73, Bell.
Total, 12.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Armstrong, Warren, ng, cb 80, Detroit.
Black, William Anderson, mc Memphis Hospital 95, cb Fayette 95, Cawoon.
Blakeney, Lewis Columbus, mc Alabama 73, cb 77, Millport.
Box, Daniel William, mc Alabama 85, cb 85, Malloy.
Bronyan, James A., mc univ Louisville 92, cb 92, Kingville.
Buckalew, Ansel Milbran, mc univ Louisville 70, cb Calhoun 86, Crews.

Collier, Scott, ng, cb 77, Crews.
Collins, Francis Alexander, mc Memphis Hospital 92, cb 92, Blowhorn.
Collins, George Jackson, mc Alabama 74, cb Fayette 84, Kennedy.
Horton, John Barkley, mc Memphis Hospital 95, cb 96, Kennedy.
Kennedy, John Oscar, mc Alabama 82, cb 82, Kennedy.
Kennedy, William Henderson, mc univ Nashville 57, cb 77, Kennedy.
Owens, A. C., (illegal), ng, Crews.
Patton, O. L., ng, (one course, illegal), Detroit.
Vaughn, George Washington, ng, Mobile (one course), cb Marion 88, Wofford.
Total, 15.

Moved into the county—O. L. Patton, from Fulton, Miss.

Moved out of the county—J. K. Lindsey, to Texas; C. L. Woods, to Hamilton, Marion county; J. R. Harris, to Winfield, Marion county.

Examinations—Judge C. Buckalew, mc Grant Chattanooga 98, certificate granted; John Kent Lindsey, mc Memphis Hospital 98, certificate granted; Clarence Love Woods, mc Memphis Hospital 98, certificate granted.

LAUDERDALE COUNTY MEDICAL SOCIETY—Tuscaloosa, 1887.

OFFICERS.

President, C. M. Watson; Vice-President, L. F. Duckett; Secretary, P. I. Price; Treasurer, P. I. Price; Health Officer, P. I. Price. Censors—J. M. Peerson, W. J. Kernochan, J. A. Pate, L. W. Arnold, P. I. Price.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Arnold, Leonard Waring, mc Ohio 77, cb 87, Florence.
Crow, Calvin Augustus, mc Jefferson 54, cb 78, Florence.
Duckett, Levi Fowler, Jr., mc univ Nashville 90, cb 94, Cloverdale.
Hardaway, William Epps, mc univ Nashville 65, cb 87, Florence.
Kennedy, Hiram Raleigh, mc univ Louisville 79, cb 81, Green Hill.
Kernochan, William Jones, mc univ Vanderbilt 79, cb 88, Florence.
Moody, Henry Altamont, mc univ Louisville 65, cb 87, Bailey Springs.
Pate, Jesse Americus, mc univ Louisville 70, cb 87, Rogersville.
Peerson, James M., mc univ Vanderbilt 90, cb 91, Florence.
Powers, Alexander Hamilton, mc univ Louisville 71, cb —, Waterloo.
Price, William Mason, mc univ Nashville 64, cb 87, Florence.
Price, Perry Isaac, mc univ Vanderbilt 86, cb 87, Florence.

Scott, George Barbiere, mc Jefferson 90, cb 90, Florence.
Watson, Charles McAlpine, mc univ Louisiana 81, cb Greene 81, Florence.

Total, 14.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Belue, John Columbus, ng, cb 90, Rogersville.
Bramlett, William M., mc univ Nashville 60, cb 87, Florence.
Boyd, P. S., (Homeopathic) mc——— —, cb —, Florence.
Henderson, A. H., mc univ Nashville 76, cb 87, Florence.
Jones, John P., mc ——— —, cb —, Lexington.
Lee, J. W., ——— —, cb —, Waterloo.
Wheeler, Charles N., ng, cb —, Florence.
Williams, George, mc ——— —, cb —, Center Star.
Total, 8.

Moved into the county—S. E. Cross, from Decatur to Killen; Dr. Zimmerman, from ——— to ———.

Moved out of the county—Thomas Jefferson Sugg, from Smithsonian to Birmingham.

Examinations—J. D. Duckett. Paper not finished.

Deaths—James Albert Douglass.

LAWRENCE COUNTY MEDICAL SOCIETY—Birmingham, 1877.

OFFICERS.

President, H. B. Burkett; Vice-President, J. W. Edwards; Secretary, W. J. McMahon; Treasurer, W. J. McMahon; Health Officer, W. J. McMahon. Censors—H. B. Burkett, L. W. Houston, J. W. Edwards, I. W. Fennell, J. R. Howell.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Burkett, Henry Bascomb, mc phy and surg Baltimore 78, cb 78, Hillsboro.
Chenault, Calvin Sidney, mc Birmingham 97, cb 97, Mt. Hope.
Edwards, John Wilson, mc univ Louisville 69, cb 79, Courtland.
Etheridge, Benjamin Franklin, mc Memphis 86, cb 86, Town Creek.
Fennell, Isham Watkins, mc univ Nashville 67, cb 78, Courtland.
Houston, John Swann, mc univ Louisville 68, cb 87, Moulton.
Houston, Leonidas Walton, mc univ Nashville 77, cb 78, Town Creek.
Howell, John Robert, mc univ Memphis 88, cb 94, Hatton.
Masterson, John Thomas, mc univ Pennsylvania 72, cb 78, Moulton.
McDonald, Jonathan Robert, mc univ Nashville 67, cb Limestone 78, Courtland.
McGehee, Ephraim Pelham, mc Alabama 94, cb 95, Town Creek.

McMahon, William Jack, mc Long Island 60, s of m New Orleans 61, cb 78, Courtland.
Pitts, James Thomas, mc univ Louisville 86, cb 94, Hillsboro.
Rand, Edgar, mc Alabama 78, cb 78, Leighton.
Robinson, James R., mc Alabama 98, cb 98, Mt Hope.
Simms, Edgar Thomas, mc univ Pennsylvania 69, cb 78, Hillsboro.
Total, 16.

PHYSICIANS NOT MEMBERS.

Burnett, William D., mc ——— —, cb —, Gum Pond.
Gibson, Frank Demetrius, mc univ Nashville 90, cb 92, Moulton.
Jones, ———, (illegal), Mt. Home.
Knox, J. C., (illegal), Mt. Home.
Zimmerman, Albert S., mc univ Louisville 98, cb Lowndes 98, Step.
Total, 5.

Moved out of the county—J. T. Masterson, from Moulton to Cherokee county; Marion M. Norton, foom Town Creek to Mississippi.

Examinations—James R. Roberson, Mt. Hope, certificate granted; Albert S. Zimmerman, Step, certificate granted; Marion M. Norton, ———, certificate granted.

LEE COUNTY MEDICAL SOCIETY—Huntsville, 1880.

OFFICERS.

President, A. H. Reed; Vice-President, J. R. Harmer; Secretary, J. R. Harmer; Health Officer, Warren Watkins. Censors—J. R. Harmer, J. M. Watkins, A. B. Bennett, A. H. Reed, J. G. Palmer.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bennett, Abijah Benjamin, mc phy and surg Baltimore 81, cb 81, Opelika.
Bedell, Robert Bruce, mc South Carolina 54, cb 81, Auburn.
Drake, John Hodges, Sr., mc Atlanta 67, cb 81, Auburn.
Drake, John Hodges, Jr., mc Alabama 91, cb 91, Opelika.
Harmer, Joseph Randolph, mc Harvard 73, cb 93, Opelika.
McCoy, Charles Breckinridge, mc phy and surg Baltimore 82, cb 82, Opelika.
Palmer, Jesse Gary, mc phy and surg Baltimore 84, cb 84, Opelika.
Reed, Andrew Hamil, mc Georgia 58, cb 81, Opelika.
Watkins, John Marion, mc Louisiana and Baltimore 71, cb Tallapoosa 87, Opelika.
Watkins, Warren, mc Bellevue Hospital 97, cb 98, Opelika.
Wheeliz, William Raleigh, mc Atlanta —, cb —, Bullock.
Total, 11.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Bloodworth, Wiley Washington, mc Nashville 69, cb 81, Phœnix City.
Floyd, Ashly, mc univ Louisiana 89, cb 95, Phœnix City.
Foreman, Arthur Levin, mc Jefferson 69, cb 81, Loachapoka.
Glass, W. T, mc ——— —, cb —, Phœnix City.
Hanson William Calvin, mc Atlanta 89, cb Russell 89, Roxanna.
Johnson, Henry Harrison, mc South Carolina—, cb —, Loachapoka.
Love, James Madison, mc South Carolina 54, cb 81, Salem.
Shelton, Menzo David, mc univ Nashville 69, cb 81, Salem.
Stowe, I. N, mc Georgia Eclectic 93. cb 95, Opelika.
Total 9.

Moved out of the county–Hugh McCullough, from Wacoochee to West Point, Ga.; J. H. Drake, Jr., temporarily to Texas; J. M. Glass, temporarily to Ashville, N. C.

Examinations—Warren Watkins, mc Bellevue 97, certificate granted; Milton Tucker Floyd, mc univ Montezuma 98, certificate granted.

LIMESTONE COUNTY MEDICAL SOCIETY—Birmingham, 1877.

OFFICERS.

President, Theo Westmoreland; Vice-President, ——— ———; Secretary, T. C. Jones; Treasurer, —— ———; Health Officer—W. J. Hagan. Censors –W. J. Hagan, T. C. Jones, G. A. Williams.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Crutcher, John Sims, mc univ Vanderbilt 89, cb 89, Athens.
Dupree, William James, mc univ Vanderbilt 76, cb 79, Westmoreland.
Hagan, William James, mc Jefferson 84, cb 84, Athens.
Hoffman, John Richardson, mc Jefferson 58, cb 77, Athens.
Jones, Thomas Crittenden, mc univ Louisville 76, cb Lawrence 78, Athens.
Moore, Elisha Dixon, old law 67, cb 78, Petty.
Pettus, Benton Sanders, mc univ Vanderbilt 92, cb 92, Pettusville.
Pettus, Joseph Albert, mc univ Nashville 67, cb 77, Elkmont.
Rankin, James Caffield Mitchell, mc univ Nashville 58, cb 78, Belle Mina.
Westmoreland, Theophilus, mc univ Nashville 56, cb 79, Athens.
Wilkinson, Milton Roil, mc univ Nashville 80, cb 98, Westmoreland.
Williams, George Allen, mc univ Nashville 80, cb 81, Elkmont.
York, Seaborn Edward, mc Louisville 78, cb 84, Athens.
Total, 13.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Carter, James Jackson, mc —— —, cb 78.
Collins, James Marshall, mc —— —, cb 78.
Gaston, Alfred Langdon, mc univ Vanderbilt 91, cb 91, Gilbertsboro.
Hill, Henry Willis, mc univ New York 49, cb 77, Mooresville.
Hill, James W, mc univ Vanderbilt 84, cb 84, Mooresville.
Jones, John P., mc ——— —, cb —, Petty.
Richardson, N. D., mc univ Vanderbilt 91, cb —, Athens.
Total, 8.

Moved into the county—N. D. Richardson, from Nashville, Tenn., to Athens.

Deaths—Nicholas Blackburn Wallace, mc Cincinnati 51, cb 78.

LOWNDES COUNTY MEDICAL SOCIETY—Mobile, 1876.

OFFICERS.

President, A. D. Coleman; Vice-President, M. H. Haygood; Secretary, N. G. James; Treasurer, N. G. James; Health Officer, S. W. Purifoy. Censors—S. W. Purifoy, S. A. Gordon, A. D. Coleman. W. P. Russell, W. B. Crum.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Buford, William Lewis, mc ———, —, cb 78.
Carr, George Washington Lafayette, mc univ Pennsylvania 55, cb 78, Fort Deposit.
Cilly, Philip Noble, mc univ Louisiana 48, cb 78, Lowndesboro.
Coleman, Aurelius Daniel, mc Alabama 80, cb 85, Mt. Willing.
Coleman, Cyrus N., mc Alabama 97, cb 97, Mt. Willing.
Crum, William Barton, mc Alabama 88, cb 88, Farmersville.
Dilburn, Samuel George, mc Alabama 75, cb 78, Braggs.
Gordon, Samuel A., mc Alabama 95, cb 95, Collirene.
Hagood, Middleton Howard, mc Alabama 98, cb 98, Mt. Willing.
Hagood, John Walter, mc Alabama 98, cb 98, Braggs.
Harrison, King W., mc Alabama 96, cb 97.
Hopping, Daniel Stiles, mc Jefferson 52, cb 78, Letohatchie.
James, Norman Gilchrist, mc Alabama 98, cb 98, Hayneville.
Marlette, Cyrus Edmund, mc Louisville 80, cb 91, Hayneville.
McQueen, Samuel Thomas, mc univ Pennsylvania 55, cb 78, Ft. Deposit.
McRea, Abraham Cruzer, mc univ Pennsylvania 50, cb 78, Lowndesboro.
Powell, Clifton Woodruff, mc Alabama 91, cb 91, Letohatchie.
Powell, Charles William, mc Alabama 90, cb 90, Lowndesboro.
Powell, George Norman, mc Alabama 96, cb 97, Hickory Grove.
Purifoy, Seaborn William, mc s of m Kentucky 94, cb Tuscaloosa 94, Lowndesboro.

Russell, William Payne, mc Atlanta 91, cb 91, Hayneville.
Sanderson, Edwin Lewis, mc Jefferson 57, cb 78, Letohatchie.
Shackleford, Frank, mc Alabama 98, cb 98, Letohatchie.
Sellers, Joel Carter, mc Vanderbilt 94, cb Crenshaw 94, Hayneville.
Snow, Charles Henry Clay, mc Tennessee 83, cb 83, Braggs.
Stephens, Dudley D, mc Alabama 95, cb Dale 95, Carrie.
Weatherly, Charles Talliaferro, mc Atlanta 74, cb 85, Benton.
Weaver, William Calvin, mc univ Tennessee 83, cb 83, Ft. Deposit.
Winnemore, Samuel Eggleston, mc univ New York 56, cb 78, Benton.
Total, 20.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Bruner, Oliver Glenn, mc Alabama 76, cb 78, Ft. Deposit.
Peake, Samuel Taylor, mc univ Vanderbilt 83, cb 83, Benton.
Reese, Charles Edwin, mc univ Jefferson 56, cb 78, Lowndesboro.
Wall, Conrad Jr., mc univ Alabama 97, cb Butler —, Ft. Deposit.
Total, 4.

Moved out of the county—John Waller Hagood, from Braggs to ———, Barbour county; Conrad Wall, Jr., from Fort Deposit to Anniston.

Examinations—John Walter Hagood, mc Alabama 98, certificate granted; Milton Howard Hagood, mc Alabama 98, certificate granted; Frank Shackleford, mc Alabama 98, certificate granted; Norman Gilchrist James, mc Alabama 98.

Deaths—Cyrus N. Coleman, mc Alabama 97, cb 97, Mt. Willing.

MACON COUNTY MEDICAL SOCIETY—Selma, 1879.

OFFICERS.

President, L. W. Johnston; Vice-President, F. M. Letcher; Secretary, P. Reynolds; Treasurer, P. Reynolds; Health Officer, J. B. Letcher. Censors—L. W. Johnston, P. Reynolds, J. S. Lightfoot, F. M. Letcher, J. P. Watkins.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Johnston, Louis William, mc Alabama 89, cb 89, Tuskegee.
Letcher, Francis Marion, mc univ Louisiana 61, cb 79, Shorter's.
Letcher, Joseph Bozeman, mc univ Tulane 97, cb 98, Shorter's.
Lightfoot, John Steele, mc univ Nashville 68, cb 78, LaPlace.
May, Thomas Jefferson, mc Alabama 91, cb 91, Notasulga.
Reynolds, Petit, mc Alabama 97, cb 97, Warrior Stand.
Smith, Milton Magruder, mc univ Louisville 91, cb Jefferson 91, Tuskegee.
Watkins, James Preston, mc phys and surg Baltimore 97, cb Lee 97, Society Hill.
Total, 8.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Aikens, John Calhoun, mc Graffenburg 46, cb Tallapoosa 78, Notasulga.
Baldwin, James Crews, mc Baltimore 93, cb 94, Borom.
Breedlove, Benjamin Wilbur, mc Atlanta 93. cb 93, Fort Davis.
Drakeford, John Ernest, mc univ Louisville 92, cb 92, Tuskegee.
Gautier, William James, mc univ Pennsylvania 50, cb 79, Tuskegee.
Kennebrew, A. H., (colored), mc Meharry 97, cb 97, Tuskegee.
Davie, Meigs, ng, state board 97, Hardaway.
Magruder, William Perry, mc Atlanta 90, cb 90, Tuskegee.
Rea, Benjamin Franklin, Jr., mc Alabama 85, cb Chambers 85, Notasulga.
Reynolds, William Alexander, mc South Carolina 52, cb 79, Warrior Stand.
Sistrunk, John, mc univ New York 59, cb 79, Society Hill.
Wood, George Pierce, mc Memphis 90, cb 90, Tuskegee.
Total, 12.

Moved out of the county—Aaron Thomas Colley, from Notasulga to Enterprise, Coffee county.

Moved into the county—B. F. Rea, Jr., from West Point, Ga., to Notasulga; Meigs Davie, from Barbour county to Hardaway.

MADISON COUNTY MEDICAL SOCIETY—Birmingham, 1877.

OFFICERS.

President, J. P. Burke; Vice-President, W. T. Pride; Secretary, T. E. Dryer; Treasurer, T. E. Dryer; Health Officer, J T. Johnson. Censors—J. T. Johnson, W. C. Wheeler, T. E. Dryer, I. W. Patton, W. D. Pettus.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Baldridge, Felix Edgar, mc univ Tulane 94, cb 95, Huntsville.
Brooks, Osceola Judkins, mc univ Tulane 93, cb Elmore 93, Huntsville.
Burke, James Pickens, mc univ Pennsylvania 53, cb 78, Meridianville.
Burwell, Edward D., mc s of m Kentucky 78, cb 78, Huntsville.
Carpenter, James Allen, mc Alabama 96, cb 96, New Hope.
Dryer, Thomas Edmund, mc Alabama 86, cb Macon 86, Huntsville.
Erskine, Albert Russell, mc univ Pennsylvania 51, cb 78, Huntsville.
Fletcher, Richard Matthew, Sr., mc univ Pennsylvania 54, cb 78, Madison Station.
Fletcher, Richard Matthew, Jr., mc Alabama 94, cb 94, Madison Station.
Graham, Benjamin Emmett, mc univ of the South Sewanee 94, cb Jackson 94, Gurley.

Haden. William Wright, mc univ Vanderbilt 90, cb 92, Owens X Roads.
Hampton, J. P., mc ——— —, cb 78, Meridianville.
Haney. Julius Tilman, mc Alabama 91, cb Colbert 92, Madison.
Hefflefinger, Marion Lorrain, mc s of m Kentucky 94, cb 95, Huntsville.
Johnson, James Thomas, mc univ Maryland 48. cb 88, Huntsville.
Layman. John Marion, mc Nashville 70, cb 87, Maysville.
Lowry, Samuel Hickman, mc Bellevue 73, cb 78, Huntsville.
M cDonnell, Henry. mc univ Louisiana 68. cb 78, Huntsville.
Patton, Irvine W., mc univ Virginia 95, cb 96, Huntsville.
Pettus, Claude, mc univ Vanderbilt 96, cb Limestone 96, Rep.
Pettus, William David, mc univ Vanderbilt 68, cb 78, Rep.
Pride, William T., mc univ Tulane 95, cb 95, Madison.
Taylor, Frederick Morse, mc Michigan 85. cb 95, Huntsville.
Westmoreland, Hawkins Davenport, mc univ Vanderbilt 92, cb Limestone 93, Huntsville.
Wheeler, William Camp, mc Bellevue 62. cb Colbert 81, Huntsville.
Williamson, Edwin Oliver, mc Chattanooga 98, cb 98, Gurley.
Total, 26.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Allen, Alfred Sidney, mc Alabama 81, cb Tuscaloosa 88, Maysville.
Blanton, Charles Edgar, mc univ Vanderbilt 82. cb 82, New Market.
Brouillette. Pierre Lawrence, mc Ohio 71, cb 84, Huntsville.
Burritt. William (Homeopathic), mc univ Vanderbilt 90, cb 97, Huntsville
Cochran, Robert E , (botanic) mc Memphis 86, cb 78, Wanderer.
Darwin, James Lanier, mc Bellevue 88, cb 90, Huntsville.
Duffield, Alfred Manley, (homeopathic) mc univ Boston 85, cb Mobile 85, Huntsville.
Farley, John Benton, mc univ Vanderbilt 86, cb 86, Farley.
Feeney, John A., mc univ Vanderbilt —, cb 98, Deposit.
Flint, James C., mc univ Louisville 78, cb 78, Gurley.
Glover, Anthony Natalie, mc univ Nashville 87, cb 87, Owens X Roads.
Hatcher, Archie Wood. mc ——— --, cb 82, Hazel Green.
Hensley, William Thomas, mc univ Nashville 78, cb 78, Triana.
Hertzler, John (homeopathic), mc univ Nashville 78, cb 82, Triana.
Hinds, Byron William. mc univ Nashville 66, cb 78, New Hope.
Horton, John Jackson, mc univ Vanderbilt 81, cb Jackson 84, New Market
Johnson, Henry Rayburn, mc univ Nashville 87, cb Marshall 87, New Hope.
Lipscomb, Albin Willshire, mc univ Nashville 96, cb 96, New Market.
McKinley, William C., mc ——— —, cb 88, Dallas.

Scruggs, Burgess E. (col.) mc univ Nashville 70, cb 79, Huntsville.
Shelby, Anthony Bowling, ——— —, cb 78, Huntsville.
Talliaferro, Charles D., ——— —, cb 96, New Market.
Total, 22.

Moved into the county—John A. Feeney, from Tennessee to Deposit; John Jackson Horton from Tennessee to New Market.

Moved out of the county—John Sims Cruther, from Center Hill to Athens.

Examinations—Edwin Oliver Williamson, certificate granted; Felix Henry Compton, certificate granted; John A. Feeney, certificate granted.

MARENGO COUNTY MEDICAL SOCIETY—Birmingham, 1877.

OFFICERS.

President, J. R. Goodloe; Vice-President, W. C. Lockhart; Secretary, A. P. McArthur; Treasurer, J. B. Whitfield; Health Officer, W. L. Kimbrough. Censors—J. H. George, R. B. McCants, W. L. Kimbrough, D. C. Moseley, J. A. Abrahams

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Abrahams, James Armistead, mc univ Alabama 92, cb Mobile 92, Demopolis.
Barron, A. Lee, mc Memphis 98, cb 98, Sweet Water.
Foscue, Francis Lewis, mc Jefferson 84, cb Perry 85, Demopolis.
George, James Hosea, mc South Carolina —, cb 78. Linden.
Goodloe, John Russell, mc univ Vanderbilt 93, cb Sumter 94, Demopolis.
Hand, Samuel Patton, mc univ Louisiana 83, cb Sumter 83, Demopolis.
Jones, James D., mc Alabama 94, cb 94, Sweetwater.
Kimbrough, William Leonard, mc univ Louisiana 83, cb 93, Linden.
Lockhart, William Crocheron, mc Alabama 89, cb 89, Dayton.
McArthur, Andrew Patterson, mc Alabama 85, cb Mobile 85, Rembert.
McCants, Robert Beall, mc Georgia Southern 82, cb 82, Demopolis.
Moseley, Daniel Coleman, mc Alabama 88, cb —, Faunsdale.
Skinner, John Samuel, mc Alabama 97, cb 98, Shiloh.
Smith, Seth Davis, mc univ Louisiana 54, cb 78, Demopolis.
Stone, Augustus Bosworth, mc Alabama 86, cb Baldwin 86, Linden.
Strudwick, Edmond, mc Jefferson 57, cb 78, Dayton.
Thomas, Charles Brooks, mc Atlanta Southern 83, cb 83, Thomaston.
Tucker, William Sidney, mc s of m Kentucky 90, cb 93, Luther's store.
Whitfield, Bryan Watkins, mc univ Pennsylvania 79, cb 49, Demopolis.

Whitfield, Charles Boaz, mc phys and surgs New York 71, cb 78, Demopolis.
Whitfield, George, mc univ Pennsylvania 58. cb 78, Old Spring Hill.
Whitfield, James Bryan, mc univ Pennsylvania 67, cb 82, Jefferson.
Wilson, Isom Griffin, mc univ Louisiana 58, cb Dallas 78, Demopolis.
Total, 23.

Honorary Member.

Evans, Josiah Thomas, mc Jefferson, 67, cb 78, Myrtlewood.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Bettis, Thomas Jefferson, mc univ Louisville 61, cb 84, Nicholsville.
Cole, William W., mc Pennsylvania 50, cb ——— —, Jefferson.
Drummond, William Fletcher, mc Maryland 47, cb 72, Dayton.
Gillespie, Robert Clanton, mc univ Louisville 83, cb 83, Putnam.
McCorkle, Thomas James, mc Alabama 83, cb 83, Siddonsville.
Nichols, J. E. mc Alabama 91, cb ——— —, Nicholsville.
Pegram, William Edward, old law 44, cb 79, Dayton.
Poellnitz, Benjamin Bruno, mc univ Louisiana 47, cb 86, Rembert.
Ruffin, James Sterling, mc univ Pennsylvania 49, cb 78, Demopolis.
Slade, Henry, mc Alabama 72, cb 87, Magnolia.
Stone, Sardine Graham, mc Alabama 87, cb Calhoun 87, Nanafalia.
Wood, John Hackworth, mc Alabama 86, cb 86, Dixon's Mills.
Total, 12.

Moved into the county— —— McMillan, to McKinkey; —— Carter, to Dixon's Mills.

Examinations—Solon L. Coleman, certificate granted; A. Lee Barron, mc Memphis 98, certificate granted; John Samuel Skinner, mc Alabama 97, certificate granted.

Death—S. S. King, McKinley, died November 8, 1898, aged 75 years.

MARION COUNTY MEDICAL SOCIETY—Montgomery, 1888.

OFFICERS.

President, A. L. Moorman; Vice-President, T. J. Springfield; Secretary, J. C. Johnson; Treasurer, M. C. Martin; Health Officer, T. J. Springfield. Censors—T. J. Springfield, J. C. Johnson, A. L. Moorman, M. C. Martin, K. B. Goggans.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Burleson, J. Rufus, mc Memphis 97, cb 97, Hamilton.
Clark, William Felin, ng, cb 88, Hamilton.
Goggans, Kimbro B., mc Memphis 93, cb 93, Hackleburg.
Holladay, Walter Scott, ng, cb 88, Bexar.
Johnson, John Carroll, mc Louisville 92, cb Fayette 92, Glen Allen.
Martin, Middleton C., ng, cb 88, Hamilton.

Moorman, Achilles Lucius, ng. cb 88, Bexar.
Palmer, Benjamin L., ng, cb 88, Hamilton.
Springfield, Thomas Jefferson, old law, cb Lamar 78, Guin.
Williams, Wiley T., ng. cb 93, Guin.
Total, 10.

PHYSICANS NOT MEMBERS OF THE SOCIETY.

Cochran, William Jefferson, ng, cb 88, Goldmine.
Earnest, James Franklin, ng, cb 88, Winfield.
Howell, James William, ng, cb 88, Knowle.
Morton, T. B., mc Chattanooga —, cb —, Winfield.
Total, 4.

MARSHALL COUNTY MEDICAL SOCIETY—Anniston, 1886.

OFFICERS.

President, T. A. Casey; Vice-President, S. M. Elrod; Secretary, M. P. Stephens; Treasurer, M. P. Stephens; Health Officer, S. M. Elrod. Censors—T. A. Casey, W. P. Hall, M. F. Patterson, P. B. Lusk, D. A. Morton.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Casey, Thaddeus Alonzo, mc univ Vanderbilt 91, cb 91, Albertville.
Davis, Samuel J., mc Atlanta 82, cb Randolph 82. Albertville.
Emerson, Jefferson F., mc univ Grant 94, cb 97, Martling.
Elrod, Samuel M., mc univ Vanderbilt 94, cb DeKalb 94, Albertville.
Hall, William Presley, mc Atlanta 86, cb 91, Hyatt.
Lusk, Phocian B., mc Bellevue 91, cb 91, Guntersville.
Jones, Thomas A., mc Birmingham 97, cb Chilton 97, Albertville.
Morton, David A., mc univ Grant 96, cb 96, Boaz.
Noel, William Lewis, ng, cb 86, Boaz.
Patterson, Millard Filmore, mc univ Vanderbilt 93, cb 93, Mid.
Stephens, Miles P., mc univ Grant 94, cb Blount 94, Whitesville.
Sherman, John R., mc univ Grant 96, cb 97, Marshall.
Total, 12.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Dodd, J. T., illegal, Boaz.
Dowdy ———, ng —— illegal, Martling.
Jackson, J. M. mc ——— —, cb —, Guntersville.
Jordan, D. C., mc Memphis 92, cb 92, Guntersville.
Lowery, John, ng, cb 86, McLarty.
McGahey, Joseph Jefferson, ng, cb 86, Columbus City.
Patterson, J. J., mc ——— —, cb —, Marshall.
Scarbrough, William M., ng, cb 87, Albertville.
Segers, G. W., illegal, McVille.
Total, 10.

Moved into the county—F. A. Jones, from near Birmingham.
Moved out the county—F. H. Macken, from Martling to Whistler.
Examinations—George Volney Bush, Whiton, certificate granted.

MOBILE COUNTY MEDICAL SOCIETY—Mobile, 1876.

OFFICERS.

President, W. H. Sledge; Vice-President, Richard Inge; Secretary, S. S. Tam; Treasurer, J. G. Thomas; Health Officer, P. J. M. Acker. Censors—G. A. Ketchum, T. S. Scales, V. P. Gaines, J. G. Thomas, G. Owen.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Acker, Paul Jerome Morris, mc Alabama 92, cb 92, Mobile.
Bondurant, Eugene DuBose, mc univ Virginia 83, cb Hale 83, Mobile.
Clarke, N. L., mc ——— —, cb ——, Mobile.
Crampton, Orson Lucius, mc Bellevue 65, cb 88, Mobile.
Dowling, Oscar, mc univ Vanderbilt 88, cb Henry 89, Mobile.
Festorazzi, Angelo, mc Alabama 87, cb 87, Mobile.
Fondé, George Heustis, mc Alabama 97, cb 97, Mobile.
Fondé, Keith, mc Alabama 94, cb 94, Citronelle.
Frazer, Tucker Henderson, mc Alabama 85, cb Lee 88, Mobile.
Gaines, Vivian Pendleton, mc Alabama 72, phys and surg New York 73, cb Choctaw 79, Mobile.
Goldthwaite, Henry, mc Alabama 96, cb 99, Mobile.
Goode, Rhett, mc Alabama 71, cb 78, Mobile.
Goodman, Duke Williams, mc univ Louisiana 91, cb 92, Mobile.
Hendon, James Jefferson, mc Alabama 86, cb 86, Mobile.
Hirshfield, Henry Phillips, univ Pennsylvania 78, cb 78, Mobile.
Inge, Henry Tutwiler, mc univ New York 83, cb 83, Mobile.
Inge, James Tunstall, mc univ New York 94, cb 94, Mobile.
Inge, Richard, mc univ New York 71, univ Virginia 79, cb Hale 78, Mobile.
Jackson, William Richard, mc Alabama 88, cb 88, Mobile.
Ketchum, George Augustus, univ Pennsylvania 46, cb 78, Mobile.
Maréchal, Edwin Lesley, mc Alabama 70, cb Baldwin 86, Mobile.
Mohr, Charles A, mc Alabama 84, cb 92, Mobile
Mohr, Herman Brent, mc Alabama 91, cb cb 92, Mobile.
Owen, Calvin Norris, mc Alabama 88, cb 88, Mobile.
Owen, Goronway, mc univ Pennsylvania 57, cb 78, Mobile.
Pape, William Barnemore, mc Alabama 82, cb Wilcox 82, Mobile.
Peters, Robert Henry, mc Alabama 94, cb 94, Mobile.
Porter, Ira Webster, mc Alabama 92, cb Wilcox 92, Mobile.
Pugh, Sidney Stewart, univ Louisiana 89, cb Clark 89, Mobile.
Sanders, William Henry, mc Jefferson 62, cb 78, Mobile.
Scales, Thomas Sidney, mc phy and surg New York 67, cb 78, Mobile.

Scales, Willis West, mc Alabama 96, cb 96, Mobile.
Sledge, William Henry, mc Alabama 80, cb 80, Mobile.
Tam, Silas Springer, mc Alabama 94, cb 94, Mobile.
Terrill, Joshua D., mc Ohio 85, cb 92, Mobile.
Thomas, James Grey, mc univ Pennsylvania 56, cb 78, Mobile.
Wright, Ruffin Ashe, mc univ Virginia 90, cb Sumter 90, Mobile.
Total, 37.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Blewitt, Means, mc ———, cb ———, Citronelle.
Clarke, W. H., mc Alabama 94, cb ———, Mobile.
Campbell, Douglas G., mc Alabama 96, cb 96, Mobile.
Dantzler, J. P., mc———, cb———, St. Elmo.
Dickson, T. Aubrey, mc univ Tulane 92, cb Montgomery 92, Mobile.
Edmunds, Samuel C., mc univ Louisville 56, cb Mobile 92, Spring Hill.
Edwards, William, mc Alabama 80, cb ———, Bayou La Batre.
Gaines Marion Toulmin, mc Alabama 90, cb 92, Toulminville.
Glass, Parker Josiah, mc Alabama 84, cb 85, Mobile.
Hall, Alexander P., mc univ Louisiana 59, cb 78, Mobile.
Harris, Oliver H., mc Alabama 95, cb 96, Mobile.
Hawley, John B., mc —— —, cb —, Mobile.
Howard, Percy John, mc Alabama 96, cb 96, Mobile.
Henderson, William Thomas, mc Detroit 96, cb 97, Mobile.
Johnston, David Elijah, mc Georgia 68, cb 78, Mobile.
Lea, William Jones, mc Alabama 86, cb 86, Mobile.
Lyon, George G., mc Pulte (Homeopathic) 88, cb —, Mobile.
Malay, Ranney Phelps, mc Alabama 84, cb Elmore 84, Whistler.
Mastin, Claudius Henry, Jr., mc univ Pennsylvania 84, cb 84, Mobile.
Mastin, William McDowell, univ Pennsylvania 74, cb 78, Mobile.
McCarty, Miles Edward, mc Alabama 78, cb 78, Mobile.
Michael, Jacob G, mc Virginia 60, cb 78, Citronelle.
Murray, R. D., (Surgeon U. S. Marine Hospital Service), Mobile.
Myers, Augustus P., mc St. Louis (Homeopathic) 88, cb —, Mobile.
Roemer, Francis John Baptiste, mc univ Louisiana 36, cb 78, Spring Hill.
Roe, Charles K., mc —— —, cb —, Spring Hill.
Sawyer, Julian E., mc univ Louisville 96, cb Geneva 96, Mobile.
Sherard, Frank Ross, mc univ Pennsylvania 94, cb 94, Mobile.
Strong, Allen L. (colored), mc Howard 85, cb Dallas 85, Mobile.
Ward, Alford G., Jr., mc Alabama 94, cb 94, Mobile.
Ward, William G., Jr., mc Alabama 95, cb 95, Mobile.
Woodcock, Burgett, mc Alabama 96, cb 97, Mobile.
Total, 32.

Moved out of the county—A. C. Klebs, from Citronelle to Chicago, Illinois; F. T. McKaig, from Mobile to Baltimore, Md.; R. C. Macy, from Mobile to ——; G. A. Sheldon, from Mobile to —— (U.S.M.H.S).

Examinations—Llewellyn Ludwig Duggar, mc Alabama 98, certificate granted; William Henry Gee, mc Alabama 98, certificate granted; William Thomas Hendon, mc Alabama 98, certificate granted; Robert Eugene Shaw, mc Alabama 98, certificate granted: James Grey Thomas, Jr., mc Alabama 98, certificate granted.

Deaths—Claudius Henry Mastin, Sr., mc univ Pennsylvania 49, died October 3, 1898; Samuel R. Olliphant, Sr.. mc univ Louisiana 55, died March 3, 1899.

MONROE COUNTY MEDICAL SOCIETY—Birmingham, 1877.

OFFICERS.

President, F. S. Daily; Vice-President, J. W. Rutherford; Secretary, J. M. Wiggins; Treasurer, J. M. Wiggins; Health Officer, J. M. Wiggins. Censors—F. S. Daily, W. M. Hestle, W. A. Stallworth, T. M. Mason.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Abernathy, William Henry, mc Transylvania 48, cb 77, Tinela.
Betts, William Franklin, mc univ Louisville 93, cb 95, Burnt Corn.
Bizzelle, Clarence Eugene, mc univ Vanderbilt 93, cb 93, Monroeville.
Busey, John, mc Alabama 94, cb 94, Jones' Mill.
Burroughs, William Monroe, mc South Carolina 59, cb 77, Pineville.
Chapman, William Rufus, mc Georgia Reform 79, cb 79, Simpkinsville.
Daily, Fielding Straughn, mc Alabama 71, cb 77, Kempville.
Hestle, William Monroe, mc Alabama 85, cb 85, Buena Vista.
Mason, Francis Henry, mc Alabama 91, cb 91, Tinela.
Mason, William Joseph, mc Atlanta 84, cb Wilcox 84, Activity.
Rutherford, James Wallace, mc Alabama 93, cb 93, River Ridge.
Scott, Gladin Gorin, mc univ Louisville 85, cb 85, Mt. Pleasant.
Stallworth, William Allen, mc Alabama 93, cb 93, Pineville.
Wiggins, James Monroe, mc Alabama 78, cb 78, Monroeville.
Total, 14.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Draughn, Robert I., —— —, —— —, Perdue Hill.
Gailiard, George Walter, mc univ Louisville 82, cb 83, Perdue Hill.
Total, 2.

Moved out of the county—James Lawrence Sowell, from Monroeville to North Alabama.

MONTGOMERY COUNTY MEDICAL SOCIETY—Eufaula, 1878.

OFFICERS.

President, F. C. Stevenson; Vice-President, R. N. Pitts; Secretary, M. B. Kirkpatrick; Treasurer, F. R. Yarbrough; Health Officer, Shirley Bragg. Censors—Glenn Andrews, W. G. Bibb, J. L. Gaston, B. R. Pearson, M. L. Wood.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Anderson, John Mordecai, mc univ City New York 91, cb 91, Montgomery.
Andrews, Glenn, mc univ City New York 86, cb 86, Montgomery.
Baldwin, Benjamin James, mc Bellevue 77, cb 83, Montgomery.
Bibb, William George, mc univ Vanderbilt 78, cb 78, Montgomery.
Bragg, Shirley, mc Alabama 75, cb Lowndes 79, Montgomery.
Chapman, Benjamin Sidney, mc univ City New York 92, cb 92, Montgomery.
Dean, Thomas Joseph, mc univ Louisville 94, cb 94, Matthews.
Gaston, John Brown, mc univ Pennsylvania 55, cb 78, Montgomery.
Gaston, Joseph Lucius, mc phy and surg New York 85, cb 88, Montgomery.
Goldthwaite, Robert, mc Bellevue 93, cb 94, Montgomery.
Haigler, James Robert, mc Alabama 97, cb 97, Montgomery.
Henry, John Hazzard, mc Philadelphia 51, cb Dallas 79, Montgomery.
Hill, Luther Leonidas, mc univ City New York 81, cb Jefferson 81, Montgomery.
Hill, Robert Sommerville, mc univ City New York 91, cb 91, Montgomery.
Hill, Robert McCullough, mc univ City New York 60, cb 78, Mt. Meigs.
Hogan, Samel Mardis, mc univ Louisville 73, cb Bullock 80, Montgomery.
Hunter, John James, mc Alabama 81, cb Coosa 83, Montgomery.
Jackson, Walter Clark, mc univ Pennsylvania 52, cb 78, Montgomery.
Johnson, Oscar, mc Alabama 96, cb Pike 96, Downing.
Kirkpatrick, Milton Barnes, mc univ Tulane 96, cb Crenshaw 96, Montgomery.
Law, Lamar, mc univ Tulane 94, cb Dallas 95, Montgomery.
Mason, Joseph Crump, mc Bellevue 81, cb 81, Snowdoun.
McCrummin, Norman Henry, mc univ Vanderbilt 84, cb 85, Ramer.
Michel, Richard Frazer, mc South Carolina 47, cb 78, Montgomery.
Montgomery, Arthur Hugh, mc Atlanta 98, cb 98, Montgomery.
Naftel, Jesse Holmes, mc Alabama 87, cb 87, Montgomery.
Naftel, St. John, mc univ Vanderbilt 79, cb 80, Montgomery.
Owen, Pascal Harrison, mc univ City New York 59, cb Lowndes 78, Montgomery.

Pearson, Benjamin Rush, mc Alabama 81, cb 81, Montgomery.
Persons, Henry Stanford, mc univ Virginia 93, cb Lee 94, Montgomery.
Pitts, Robert Newton, mc Atlanta 90, cb Russell 90, Montgomery.
Pollard, Charles Teed, mc univ Tulane 97, cb 97, Montgomery.
Powell. Claudius William, mc Alabama 88, cb 88, Fleta.
Robinson, Louis Dominick, mc univ Tulane 96, cb 96. Montgomery.
Sadler, John Milton, mc univ Louisiana 73, cb Perry 73, Montgomery.
Sadler, Wilbur Fisk, mc phy and surg Baltimore 91, cb Autauga 91, Montgomery.
Steiner, Samuel Jackson, mc univ Vanderbilt 79, cb Butler 79, Montgomery.
Stevenson, Forney Caldwell, mc phy and surg New York 93, cb Calhoun 93, Montgomery.
Sturm, Max, mc Ohio 89, cb Autauga 95, Montgomery.
Thigpen, Charles Alston, mc univ Tulane 88, cb Butler 88, Montgomery.
Thigpen, Francis Marion, mc univ Tulane 91, cb Butler 91, Montgomery.
Thorington, Thomas Chilton, mc univ Tulane 94, cb 94, Montgomery.
Waller, George Platt, mc univ City New York 92, cb 92, Montgomery.
Watkins, Isaac Lafayette, mc Bellevue 78, cb Bullock 86, Montgomery.
Weedon. Hamilton, mc Alabama —, cb Barbour —, Montgomery.
Wilkerson, Wooten Moore, mc univ City New York 80, cb Perry 80, Montgomery.
Wilkerson, Charles Walter, mc univ Tulane 98, cb Perry 98, Montgomery.
Wilkinson, Harry Bookman, mc univ Virginia 94, cb Tuscaloosa 95, Montgomery.
Wilkinson, James Anthony, mc univ Louisville 69, cb Escambia 86, Montgomery.
Wood, Milton LeGrand, mc Bellevue 77, cb 84, Montgomery.
Yarbrough, Frank Reid, mc univ Vanderbilt 98, cb Crenshaw 98, Montgomery.
Total, 51.

PHYSICIANS NOT MEMBERS OF THE SOCIETY,

Buchanan, J. P., mc Alabama 90, cb Butler 90, Montgomery.
Brown, James Mack. mc Alabama 89, cb 89, Sellers
Battle, H. E., mc —— —, cb —— —, Pine Level.
Calloway, James Wesley, mc univ Vanderbilt 81, cb 82, Snowdoun.
Cutts, William Parsons, ng (old law), Chambers.
Davis, Leroy W., mc Georgia 57, cb 78, Morganville.
Duncan, Thomas, mc Alabama 92, cb 92, Mt. Carmel.
Dungee, Alfred Coleman (colored), mc Howard 89, state board 91, Montgomery.
Grimes, Erasmus Darwin, mc univ Louisville 66, cb 77, Montgomery.

Harris, Andrew Jackson, mc —— —, cb 85, Lapine.
Jackson, Edward Beatty, mc Alabama 85, cb 85, Ramer.
Kendrick, William Toulmin, mc Atlanta 76, cb Butler 78, Montgomery.
Kirk, Eben Bell, mc Alabama 85, cb 85, Montgomery.
McDade, James, mc Georgia 72, cb 78, Waugh.
McLean, James, mc univ Louisville 66, cb 78, Hope Hull.
Means, Thomas Alexander, mc Atlanta 57, cb 78, Montgomery.
Merriwether, James L., mc —— —, cb —— —, Mathews.
Nicholson, John Cogburn, mc Jefferson 55, cb 79, Mt. Meigs.
Patterson, Daniel S., mc —— —, cb —— —, Montgomery.
Rushing, Thomas Elbert, mc Alabama 90, cb 91, Pike Road.
Sankey, George L., mc univ Louisville 77, cb 78, Tharin.
Sankey, John Thomas, mc ——, (retired) cb 78, Tharin.
Scott, David H. C. (colored), mc Nashville 95, cb Jefferson 95, Montgomery.
Stone, Henry Llewellen, mc univ Maryland 68 (retired), Montgomery.
Townsend, A. F., mc —— —, cb —— —, Pine Level.
Townsend, J. B., mc —— —, cb —— —, Pine Level.
Total, 26.

Moved into the county—James Anthony Wilkinson, from Flomaton to Montgomery; Hamilton Weedon, to Montgomery; Frank Reid Yarbrough, to Montgomery; J. P. Buchanan, to Montgomery.

Moved out of the county—Robert Merritt Davis, to Prattville.

Examinations—A. H. Montgomery, mc Atlanta 98, certificate granted.

Deaths—James Douglas, mc South Carolina 57, cb 78, Montgomery.

MORGAN COUNTY MEDICAL SOCIETY—Mobile, 1876.

OFFICERS.

President, F. B. Hunter; Vice-President, W. C. Buckley; Secretary, E. J. Conyngton; Treasurer, E. J. Conyngton; Health Officer, S. L. Rountree. Censors—M. W. Murray, W. C. Buckley, W. L. Dinsmore, S. L. Rountree, W. L. Barclift.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Barclift, Willis Anderson, mc univ Tennessee 78, cb 79, Hartselle.
Buckley, Walter Colquit, mc phy aud surg New York 85, cb 87, Decatur.
Conyngton, Enoch James, mc St. Louis 83, cb 87, Decatur.
Cook, W. H., mc ———, cb —, Falkville.
Dinsmore, William Lewis, mc univ Vanderbilt 81, cb Lawrence 82, Decatur.

Hunter, Felix Bryan, mc univ Vanderbilt 81, cb Lawrence 86, Falkville.
Martin, ——— ———, mc——— —, cb —, Basham's Gap.
Murray, Michael William, mc univ McGill, Montreal, Canada 90, cb 90, New Decatur.
Rountree, Scott Louis, mc Jefferson 58, cb 78, Hartselle.
Shelton, John Benjamin, mc St. Louis 92, cb Jackson 96, New Decatur.
Sherrill, Richard Byrd, mc Alabama 87, cb 94, Hartselle.
Winston, David Macon, mc Alabama 86, cb 86, Summerville.
Total, 12.

NAMES OF MEMBERS AND THEIR COLLEGES AND POST-OFFICE.

Binford, Peter, mc New Orleans 61, cb Morgan 79, Summerville.
Gaston, Paul Cheeves, mc univ Vanderbilt 78, cb Limestone 78, New Decatur.
Gill, Jordan Lawrence, mc univ Louisville (one course) 69, cb 78 Summerville.
Gillespie, James Clark, mc univ Vanderbilt 81, cb Madison 81, New Decatur.
Hodgeboom, Charles Ellis, mc ——, cb 90, Talucah.
Hodges, John Pruitt, mc univ Vanderbilt 78, cb Lawrence 78, Danville.
Kitchens, John Mowbray, mc Alabama 85, cb Lawrence 85, Hartselle.
Oden, Alexander Hamilton, ng, cb Cullman 78, Lawrence Cove.
Peck, Cicero Fain, mc univ Tennessee 90, cb 90, Summerville.
Ryan, Thomas LaFayette, mc univ Nashville 58, cb 87, Hartselle.
Smith, John Stanhope, mc univ Louisville 47, cb 78, Woodland Mills.
Steers, Willis Wood, (col.) mc univ Michigan 88, cb Montgomery 88, Decatur.
Stephenson, Edison David, mc univ Nashville 68, cb 78, Danville.
Stephenson, Richard Lewis, ng, cb 78, New Decatur.
Stringer, William Morton, mc univ Tennessee 93, cb 99, Falkville.
Thomason, William Black, mc Memphis —, cb 86, Hartselle.
Turney, Joseph Simpson, mc univ Vanderbilt 82, cb 82, Hartselle.
Wilhite, Simeon Madison, mc Memphis 91, cb 91, Cedar Plains.
Wilson, Able Robert, mc Alabama (one course), cb Lawrence 85, Hartselle.
Total, 19.

Moved out of the county—E. C. Rosamond, to Jasper, S. E. Cross, to Colbert county.

PERRY COUNTY MEDICAL SOCIETY—Montgomery, 1875.

OFFICERS.

President, Ed. Swann; Vice-President, S. T. Whitfield; Secretary, J. B. Hatchett; Treasurer, E. B. Thompson; Health Officer, J. B.

Hatchett. Censors—O. L. Shivers, E. B. Thompson, G. R. Johnson, S. T. Whitfield, J. B. Hatchett.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Barron, William Rowan, mc univ Virginia 61, cb 78, Scotts.
Hatchett, James Benton, mc univVanderbilt 90, cb Limestone 90 Marion.
Johnson, Gains Rowan, mc s of m Kentucky 92, cb 92, Marion.
Shivers, Offa Lunsford, mc univ Louisiana 73, cb Hale 78, Marion.
Swann, Edward, mc s of m Kentucky 95, cb 95, Spratts.
Thompson, Elias Benson, mc univ Louisiana 69, cb 78, Marion.
Whitfield, Sidney Thomas, mc univ Tulane 94, cb 94, Uniontown.
Wilkerson, Charles A., mc univ New York 75, cb 78, Marion.
Total, 8.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Collier, Armstead Mayfield, ng, cb 78, Collinsville.
Cross, William Cyprin, mc univ Vanderbilt 80, cb 80, Uniontown.
Henderson, William T., mc Alabama 98, cb Mobile 98, Marion.
Tucker, James Buchanan, mc univ Vanderbilt 78, cb 79, Jerico.
Webb, Louis De Yampert, mc univ New York 69, cb Hale 78, Scotts.
Pou, James Rufus, mc univ South Carolina 55, cb 78, Uniontown.
Total, 6.

Examinations—For the practice of medicine, Walter Charles Wilkerson, certificate granted.

Death—Wesley Nathan Mears Cohan, died last July. Old age.

*PICKENS COUNTY MEDICAL SOCIETY—Eufaula, 1878.

OFFICERS.

President, G. B. Wimberly; Vice-President, S. H. Hill; Secretary, H. B. Upchurch; Treasurer, H. B. Upchurch; Health Officer, H. B. Upchurch. Censors—S. H. Hill, G. B. Wimberly, N. Hill. J. Moody, H. B. Upchurch.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Agnew, James Alexander, mc Alabama 74, cb 78, Neal's Mill.
Barnett, James Francis, mc Alabama 92, cb 92, Temple.
Clear, Christopher Columbus, mc Alabama 85, cb 85, Byars.
Cook, Thomas Hugh G., mc Alabama 86, cb 86, Stone.
Hill, Newton, mc Alabama 76, cb 85, Pickensville.
Hill, Samuel Henry, mc univ Louisville 70, cb 78, Carrollton.
Jones, Thomas Bolivar, mc Bellevue 86, cb 86, Stone.
Kirk, Arthur Albertus, mc Alabama 97, cb 97, Temple.
Long, James Barclay, mc Louisville 93, cb 95 Pickensville.
McKinstry, Thomas Harlan, mc Alabama 83, cb 93, Carrollton.

Moody, Joseph, mc univ Louisville 71, cb 78, Franconia.
Moorhead, Henry Clay, univ Nashville 69, cb 78, Reform.
Murphy, Thomas Elmore, mc Alabama 92, cb 92, Bethany.
Snoddy, Ephraim A., mc Alabama 97, cb 97, Garden.
Sterling, Samuel Johnston, mc Alabama 61, cb 78, Olney.
Upchurch, Harvey Benton, mc Alabama 92, cb 92, Carrollton.
Williams, Henry Lawrence, mc Jefferson 53, cb 78, Dunbar, Miss.
Wimberly, Gilbert Bush, mc Alabama 92, cb 92, Reform.
Wyatt, Rufus Riley, mc univ Nashville 84, cb 89, Memphis.
Total, 19.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Baird, Duke Orleans, ng, cb 78, Reform.
Brandon, Richard Clifton, mc Alabama —, cb 88, Gordo.
Collins, ———, mc ———, cb———, Palmetto.
Davis, John Longmire, mc univ Vanderbilt 88, cb 88, Gordo.
Deal, Seaborn Edgar, mc Alabama 94, cb Tuscaloosa 94, Pleasant Grove.
Duncan, John Francis, mc Alabama 74, cb 78, Beard's.
Hancock, Jesse, mc Alabama 75, cb 78, Stafford.
Rickman, John Westley, ng, cb 78, Stafford.
Total, 8.

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*NOTE.—As no report has been received from Pickens county this year the report for 1898 is here reproduced.

PIKE COUNTY MEDICAL SOCIETY—Eufaula, 1878.

OFFICERS.

President, J. S. Beard; Vice-President, C. W. Hilliard; Secretary, C. W. Hilliard, Jr.; Treasurer, C. W. Hilliard, Jr.; Health Officer, C. W. Hilliard. Censors—P. H. Brown, J. A. McEachern, W. B. Sanders, J. U. Robertson, P. U. Brown.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Beard, Josephus Simmons, mc univ New York 79, cb 79, Troy.
Brown, Pugh H., mc univ New York 54, cb 78, Troy.
Brown, Pugh U., mc univ Tulane 95, cb 95, Troy.
Eiland, William A., mc Atlanta 81, cb 84, Henderson.
Hilliard, Charles W. Sr., Georgia Reform 61, cb 78, Troy.
Hilliard, Charles W. Jr., mc Alabama 95, cb 95, Troy.
McEachern, C. P., Alabama 96, cb 96, Banks.
McEachern, John Adolphus, mc univ Louisville 89, cb 89, Brundige.
Moore, Thomas Franklin, mc Alabama 91, cb Elmore 92, Linwood.
Mullins, James Thomas, mc Augusta 72, cb Montgomery 82, Troy.
Robertson, James W., mc Alabama 93, cb 93, Tarantum.

Sanders, William B., mc Atlanta Southern 85, cb 85, Troy.
Sanders, William Shelby, mc univ Vanderbilt 92, cb 92, Milo.
Watkins, James M , mc univ Vanderbilt 94, cb 94, Tarantum.
Williamson, George W., mc 93, cb Crenshaw 93, Goshen.
Total, 15.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Albritton, George Allen, mc univ Louisville 72, cb Crenshaw 82, Henderson.
Beasley, James M., mc Alabama 96, cb 96, China Grove.
Bean, James Madison, mc Bellevue 79, cb Bullock 82, Buck Horn.
Boyd, Leroy R., mc Alabama 87, cb —, Troy
Broach, Francis Marvin, mc Atlanta 90, cb 90, Ansley.
Crossley, William Andrew, mc South Carolina 54, cb 78, Banks.
Dewberry, John Hunter, mc Jefferson 56, cb 78, Brundidge.
Dennis, S. H , mc univ Graffenberg 58, cb 78, Olustee Creek.
Dismuke, Benjamin James, mc Georgia 57, cb 84, China Grove.
Ford, Elchana Gardner, ng, old law 56, cb 78, Troy.
Foreman, Howell, mc Jefferson 58, cb 78, Brundidge.
Hamil, Irby Watson, mc univ Louisville 76, cb 78, Goshen Hill.
Johnson, Edward Harris, mc univ Washington, Md., 69, cb Crenshaw 82, Troy.
Pennington, James Cincinnatus, mc univ Tennessee 94, cb 94, Orion.
Salter, C. P., mc —, cb —, Josie.
Townsend, Austin C., mc Augusta, Ga., 61, cb 78, China Grove.
Treadwell, L. M., irregular, Troy.
Wagner, John Troup, ng, cb Montgomery 78, Shady Grove.
Total, 18.

Moved into the county—C. P. Salter, from Bullock county to Josie.

Moved out of the county—Hamilton M. Weeden, from Troy, to Montgomery.

Examinations—Knox Mullins, mc univ Tulane 98, certificate granted; Joe Frank Siler, mc univ Virginia 98, certificate granted.

Deaths—Gustavus Hendrick, mc univ Pennsylvania 53, Brundidge, of softening of Brain.

RANDOLPH COUNTY MEDICAL SOCIETY—Eufaula, 1878.

OFFICERS.

President, J. C. Swann; Vice-President, W. G. Floyd; Secretary, P. G. Trent, Sr.; Treasurer, P. G. Trent, Sr.; Health Officer, P. E. Dean. Censors—W. G. Floyd, J. C. Swann, J. W. Hooper, P. E. Dean, H. B. Disharoon.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bonner, William Wallace, mc Atlanta Southern 92, cb 94, Rock Mills.
Dean, Pierce Elliott, mc Alabama 92, cb 93, Wedowee.

Disharoon, Henry Beauregard, mc phy and surg Baltimore 85, cb 85, Roanoke.
Duke, Anderson Welcome, mc Graffenburg 49, cb 79, Graham.
Duke, Jefferson Davis, mc Atlanta Southern 84, cb 88, Graham.
Floyd. William Gibson, mc univ Maryland 88, cb 92, Roanoke.
Hood, Joseph Robertson, mc Oglethorpe 57, cb 85, Wedowee.
Hooper, John Wilson, mc Jefferson 84, cb Tallapoosa 84. Roanoke.
Jordan, Charles Alexander, mc Atlanta Southern 84, cb 87, Swann.
Liles, Madison DeKalb, ng, cb 79, Dingler.
McLendon, William Head, mc Alabama 96, cb 96, Rock Mills.
McManus, Michael M., ng, cb 79, Lamar.
Pool, Wyatt Heflin, mc Georgia 67, cb 79, Roanoke.
Stevens, Reuben Calvin, mc Atlanta Southern 92, cb Cleburne 97, Graham.
Swann, Joseph Charles, mc Atlanta 90, cb 90, Wedowee.
Taylor. James Ratchford, mc Atlanta 98, cb 98, Eastaboga.
Traylor, George Washington, mc Georgia 91, cb 94, Lamar.
Trent, Powhatan Glover, mc Atlanta 88, cb 88, Roanoke.
Trent, Powhatan Green, mc Jefferson 67, cb 85, Roanoke.
Vineyard, James Leonard, mc Georgia Reform 49, cb 79, Rock Mills
Welch, James Madison, mc Atlanta Southern 92, cb 93, Truett.
White, Luther Leonidas, ng, cb 79, White.
Wood, James William, mc Atlanta Southern 97, cb Clay 97, Almond.
Wright, Columbus B., mc Atlanta 98, cb 98, Wedowee.
Total, 24.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Clegg, James, mc Georgia Reform 49, cb 89, Almond.
Dowdy, R. M., mc univ Vanderbilt —, cb —, Hightower.
Gauntt, Elbert Tillman, mc Atlanta 76, cb 84, Ophelia.
Heflin, Wilson Lumpkins, mc Georgia 48, cb 85, Roanoke
Weathers, William, ng, cb 87, High Shoals.
Total, 5.

Moved into the county—Nathaniel Spragins Black, from Russell county to Rock Mills.

Examinations—James Ratchford Taylor, mc Atlanta 98, certificate granted; Columbus B. Wright, mc Atlanta 78, certificate granted.

Deaths—Jasper David Liles, mc univ Louisville 70, cb 85, Roanoke, February 13, 1897, of cardiac disease; Erastus Hood McLendon, mc Graffenburg 60, cb 79, Rock Mills, July 20, 1898, of cardiac dropsy.

RUSSELL COUNTY MEDICAL SOCIETY—Tuscaloosa, 1887.

OFFICERS.

President, J. P. Norris; Vice-President, A. R. Allen; Secretary, W. B. Prather; Treasurer, W. B. Prather; Health Officer, W. B. Prather. Censors—T. A. Johnson, J. P. Norris, W. B. Hendrick, G. D. Paschal, W. B. Prather.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Allen, Arthur Redding, mc Atlanta 96, cb 98, Oswichee.
Echols, Moses Mason, mc Alabama 97, cb Macon 97, Girard.
Gann, William F., mc univ Louisville —, cb —, Columbus, Ga.
Hendrick, Frank Gustavus, mc univ Louisville 94, cb Pike 94, Crawford.
Hendrick, Walter Branham, mc univ Louisville 90, cb Pike 90, Hurtsboro.
Johnson, Thomas Abner, mc univ Tennessee 80, cb 85, Jernigan.
Joiner, William Thomas, mc Atlanta 91, cb 91, Pittsboro.
Norris, John Pinkney, mc Atlanta 91, cb 91, Uhland.
Paschal, George Dennis, mc univ New York 72, cb 87, Hurtsboro.
Paschal, John, mc Atlanta 98, cb 98, Glennville.
Prather, William Butler, mc Atlanta 74, cb 88, Seale.
Smith, Reuben Arnold, mc univ New York 52, cb 87, Hatchechubbee.
Total, 12.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Howard, Thomas Watson, ng, cb 88, Girard.
Phillips, Lovic Wynn, mc univ Tulane —, cb —, Columbus, Ga.
Prather, Robert Clark, mc Alabama 98, cb —, Girard.
Russell, William Arnold, mc univ Ohio —, cb Barbour —, Pittsboro.
Total, 4.

Moved out of the county—Nathaniel Spragins Black, from Uchee to Rock Mills, Randolph county: Zachary Walton Williams, from Glennville to Birmingham.

SHELBY COUNTY MEDICAL SOCIETY—Birmingham, 1877.

OFFICERS.

President, E. G. Givhan; Vice President, H. I. Williams; Secretary, J. R. Morgan; Treasurer, J. R. Morgan; Health Officer, J. H. Gunn. Censors—J. R. Morgan, W. S. DuBose, J. H. Williams, D. L. Wilkinson, H. C. McAdams.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Blevins, John Falkner, mc univ Louisiana 59, cb Dallas 78, Calera.
Boyer, Joseph Buford, mc s of m Kentucky 92, cb 92, Wilsonville.
DuBose, Wilds Scott, mc Atlanta 58, cb 78, Columbiana.

Edwards, David W., mc Atlanta 66, cb 78, Wilsonville.
Fields, James G., old law, cb 78, Calera.
Givhan, Edgar Gilmore, mc Alabama 94, cb Chilton 94, Montevallo.
Gunn, James Hamlin, mc Bellevue 69, cb 78, Calera.
Hargrove, Robert Harris, mc Bellevue 72, univ Vanderbilt 86, cb 78, Maylene.
Mc Adams, Henry Clay, mc Alabama 82, cb Mobile 82, Shelby.
Morgan, Joseph Reid, mc univ Louisville 66, cb 78, Shelby Springs.
Nelson, Thomas Green, mc univ National, Lebanon, O., 93, cb 93 Harpersville.
Oliver, Christopher Carlton, mc Atlanta 69, cb 78, Calera.
Smith, Garland Henry, mc Alabama 87, cb 90, Pelham.
Wilkinson, David Leonidas, mc univ Tulane 94, cb Autauga 94, Montevallo.
Williams, Hartwell Isaac, mc Alabama 87, cb 87, Columbiana.
Williams, John Harford, mc univ Louisville 75, cb 78, Columbiana.
Total, 16.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Acker, James Wilson, old law, cb Tuscaloosa 78, Montevallo.
Chandler, Edward Pendleton, old law, cb 79, Vincent.
Denson, Eli Forest, mc univ Vanderbilt 79, cb 79, Pelham.
DuBose, Frank Dudley, mc South Carolina —, cb 78, Shelby.
Goodson, Jasper, old law, cb Tuscaloosa 78, Siluria.
Griffin, Alpheus J, old law, cb 78, Lawley.
Hays, William S., mc Alabama 87, cb 87, Helena.
Johnson, Joseph Madison, mc univ Vanderbilt 83, cb 83, Pelham.
McGraw, Allen Edward, mc univ Louisiana 73, cb 78, Vincent.
Smothers, B. H., mc ——— —, cb —, Weldon.
Tucker, Milton Robert, old law, cb 78, Helena.
Total, 11.

Moved into the county—Joseph Philip Givhan, from Chilton county to Calera; James Gray Jeffrey, from Clark county to Montevallo; Hugh T. Caffey, from Texas to Calera.

Moved out of the county—Leonard Madison Waldo.

Examinations—Rufus Coons Jones, mc Montezuma 98, certificate granted; Edwin Columbus Bandy, mc Montezuma 98, certificate granted.

Deaths—Henry Backus, honorary member.

ST. CLAIR COUNTY MEDICAL SOCIETY—Eufaula, 1878.

OFFICERS.

President, W. M. Turner; Vice-President, W. F. Vandegrift; Secretary, J. W. Ash; Treasurer, J. W. Ash; Health Officer, D. E. Cason. Censors—W M. Turner, W. F. Vandegrift, W. A. Beason.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Ash, John Winston, mc univ Tulane 80, cb 80, Springville.
Bass, John Burrell, mc phy and surg Baltimore 70, cb 78, Ashville.
Beason, William A., mc phy and surg Baltimore 92, cb 93, Ashville.
Brown, Jackson Tucker, mc Birmingham 97, cb 98, Riverside.
Cason, Davis Elmore, mc univ Nashville 73, cb 78, Ashville.
Crump, James Wells, mc Atlanta 75, cb 78, Steel's Depot.
McLaughlin, James Madison, mc ———, state board 80, Springville.
Turner, William M , mc Alabama 92, cb 92, Riverside.
Vandergrift, Washington Franklin, mc univ Tulane 80, cb 80, Branchville.
Total, 8.

Honorary Members.

Cason, James Calvin, mc Memphis —, cb 85, Coal City.
Jones, James Hunter, mc ———, cb —, Ragland.
Total, 2.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Alverson, Robert F., mc Alabama 93, cb 93, Coal City.
Crump, Henry Green, old law, cb 79, Seddon.
Embry, James Carl, mc univ Georgia 89, cb 90, Cropwell.
Evans, Richard Proctor, old law, cb 79, Coal City.
Garlington, Henry Spright, mc Alabama 87, cb 87, Ragland.
Hamilton, Charles Henry, old Law, cb 79, Eden.
Ware, John Blassingame, old law cb 79, Kelley's Creek.
Total, 7.

Moved into the county— ——— Gray, from Clay county to Easonville.

Moved out of the county—E. P. Cason, from Ragland to —. R. J. Harris, from Springville to Alamuchee.

Examinations—Jackson Tucker Brown, mc Birmingham 97, Riverside, certificate granted; Marcus W. Laney, mc Chattanooga 94, certificate refused.

Deaths—George W. Bartlett, Easonville.

SUMTER COUNTY MEDICAL SOCIETY—Mobile, 1876.

OFFICERS.

President, A. L. Vaughan; Vice-President, J. P. Scales; Secretary, D. S. Brockway; Treasurer, D. S. Brockway; Health Officer, D. S. Brockway. Censors—D. S. Brockway, M. B. Cameron, T. J. Bickley, W. J. McCain, A. L. Vaughan.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bancroft, Joseph Dosier, mc univ Vanderbilt 94, cb 94, Sumterville.
Bickley, Thomas Jefferson, mc univ Vanderbilt 81, cb 81, Gainesville.
Brockway, Dudley Samuel, mc Jefferson 81, cb 81, Livingston.
Cameron, Mathew Bunyan, mc Alabama 86, cb 86, Sumterville.
Gilmore, John Neil, mc New York —, cb 78, Gaston.
Hearn, William Thomas, mc univ Louisville 82, cb 82, York.
Henagan, Darby, mc South Carolina 77, cb 78, Epps.
Henagan, James Davis, mc Alabama 91, cb 94, Epps.
Kinebrough, T. G., mc Alabama 96, cb 98, Coatopa.
McCain, Jasper, mc Alabama 91, cb 91, Livingston.
Parham, John Calhoun, mc s of m Kentucky 77, cb 78, Gainesville.
Reed, John H. G., mc univ Louisville 90, Epps.
Scales, John Patton, mc univ Louisville 97, cb 98, Brewersville.
Vaughan, Amos Lemuel, mc univ Louisville 84, cb 84, Cuba.
Ward, Henry Bascom, mc Alabama 78, cb 78.
Total, 15.

Honorary Members.

James, William Hamilton, mc ———, cb 78, York.
Sholl, Edward Henry, mc med and surg Pennsylvania 56, cb 78, Birmingham.
Total, 2.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Carr, Paul Ellington, mc univ Louisville 91, cb 91, Warsaw.
Hagler, Prewett LaFayette, mc Alabama 91, cb 91, Gainesville.
Hale, Robert Hadden, mc univ Louisville 79, cb 80, York.
Harris, Evan P., mc univ Louisiana 69, cb 78, Rosser.
Nash, James Toney, mc univ Louisville 80, cb 80, Livingston.
Shamberger, William Brantly, mc univ Louisville 84, cb Choctaw 85, Rosser.
Total, 6.

Moved into the county—T. G. Kimbrough, from ——— to Coatopa; John Patton Scales, from ——— to Brewersville.

Moved out of the county—J. E. Jones, from Belmonte to ——— .

Examinations—John Patton Scales, mc univ Louisville 97, cb 98, Brewersville, certificate granted.

Deaths—James Hamilton Giles, mc Louisville 67, cb 78, Cuba, old age.

TALLADEGA COUNTY MEDICAL SOCIETY—Anniston, 1886.

OFFICERS.

President, J. T. Harrison; Vice-President, W. F. Thetford; Secretary, W. G. Harrison; Treasurer, B. B. Simms; Health Officer, W. F. Thetford. Censors—J. T. Harrison, B. B. Simms, J. S. McCants, S. W. Welch, G. A. Hill.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bishop, Wallace Beverly, ng, state board 95, Talladega.
Caldwell, William Draton, mc univ Vanderbilt 88, cb Lauderdale 88, Kymulga.
Calvin, James Pickett, mc s of m Kentucky 91, cb Macon 91, Ragan.
Craddock, Felix Hood, mc univ Vanderbilt 95, cb 95, Sylacauga.
Dixon, John, mc Jefferson 56, cb 86, Fayetteville.
Hamilton, William Thomas, mc Alabama 80, cb Mobile 80, Talladega.
Harrison, John Tinsley, mc Atlanta 81, cb 86, Talladega.
Harrison, William Groce, mc univ Maryland 92, cb 92, Talladega.
Heacock, John William, mc univ Louisiana 66, cb 86, Alpine.
Hill, George Armstrong, mc Jefferson 70, cb 86, Wynette.
Hutchinson, W. H., mc Chattanooga 93, cb St. Clair 97, Childersburg.
Kent, T. J., mc Alabama 97, cb Coosa 97, Fayetteville.
McCants, John Samuel, mc Atlanta 66, cb 86, Talladega.
Powell, Thomas Jefferson, mc univ Maryland 66, cb 86, Childersburg.
Pruett, Madison Jasper, mc Memphis Hospital 96, cb Clay 96, Sycamore.
Pugh, Braxton Bragg, mc Alabam 89, cb Clarke 98, Ironaton.
Simms, Benjamin Brit, mc Jefferson 85, cb Coosa 86, Talladega.
Sims, Albert Gallatin, mc univ Nashville 69, cb 86, Renfro.
Thetford, William Fletcher, mc univ Louisiana 67, cb Greene 78, Talladega.
Welch, Samuel Wallace, mc phy and surg Baltimore 93, cb 93, Talladega.
Whitten, Edgar Hinton, mc Alabama 88, cb 89, Munford.
Wrenn, Edward Bailey, mc Alabama 90, cb 90, Talladega.
Total, 22.

Honorary Members.

Hendricks, Humphrey Green, mc Philadelphia 52, cb 86, Talladega.
Stockdale, John Lark, mc South Carolina 54, cb 86, Boswell.
Taylor, William, mc Louisiana 52, cb 86, Talladega.

Vandiver, John Harrington, mc Jefferson 45, cb 86, Talladega.
Welch, William Americus, mc Jefferson 48, cb 86, Alpine.
Total, 5.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Bailey, Robert Emmett, mc Atlanta 66, cb 86, Silver Run.
Brooks, Alpheus Olin, mc Atlanta Southern 87, cb Clay 87, Lincoln.
Castleberry, William Trice, mc Georgia 72, cb 86, Lincoln.
Coker, Marion Jackson, ng, cb Clay 87, Sylacauga.
Coker, Charles Francis, ng, cb Clay 87, Ragan.
Conway, Magnus Eli, mc univ Vanderbilt 88, cb 88, Sylacauga.
Donaldson, John Thaddeus, mc South Carolina 67, cb 86, Eastaboga.
Pearson, James Emmett, mc Alabama 88, diploma recorded, Sylacauga.
Sorrell, William Henry, ng, cb 82, Sylacauga.
Total, 9.

Moved into the county—Daniel Blake Harris, mc Atlanta Southern 97, cb Clay —, Munford; Dr. Taylor, mc Atlanta Southern 98, cb Clay 98, Eastaboga.

Moved out of the county—John A. McGhee, from Sycamore to some point in Mississippi.

Deaths—Louis Whitfield Pitchford, mc Atlanta Southern 88, cb Cleburne 89, at Eastaboga, from typhoid fever; Robert Preston Steadham, mc Chattanooga 93, Cleburne 94, at Childersburg from typhoid fever.

TALLAPOOSA COUNTY MEDICAL SOCIETY—Selma, 1879.

OFFICERS.

President, A. J. Nolen; Vice-President, E. W. Hart; Secretary, A. LaF. Harlan; Treasurer, R. V. Salmon; Health Officer, A. LaF. Harlan. Censors—George W. Vines, J. A. Goggans, A. J. Coley, R. V. Salmon, A. LaF. Harlan.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bruce, Homer S., mc Atlanta 91, cb Chambers 91, Camp Hill.
Callaway, George McDaniel, mc Alabama 89, cb Clay 89, Pinckneyville.
Carleton, William George, mc univ Vanderbilt 82, cb 82, Dudleyville.
Coley, Andrew Jackson, mc Jefferson 80, cb 81, Alexander City.
Goggans, James Adrian, mc univ New York 77, cb 82, Alexander City.
Hamner, Harper Talliaferro, mc univ Vanderbilt 89, cb Chambers 90, Camp Hill.
Harlan, Aaron LaFayette, mc Alabama 86, cb 86, Alexander City.
Harlan, John James, mc Alabama 72, cb 82, Dadeville.
Harlan, W. J., mc univ Tulane 98, cb 99, Hackneyville.

Hart, Eugene Walker, mc Baltimore 91, cb 91, Walnut Hill.
Langley, O. V., mc Atlanta 95, cb 96, Camp Hill.
Lightfoot, Robert W., mc South Carolina 62, cb 82, Alexander City.
McLendon, Joseph Wyley, mc Jefferson 88, cb 88, Dadeville.
Nolen, Abner Jackson, mc Louisville 80, cb Coosa 82, New Site.
Nolen, Isaac Daniel, mc univ Louisville 92, cb Coosa 92, New Site.
Radford, George Clements, ng, cb Clay 87, Bulgers.
Reagan, Onslow, ng, cb 82, Alexander City.
Salmon, Robert Vaughn, mc Alabama 75, cb 82, Dadeville.
Shepard, Orlando Tyler, mc Graffenburg 54, cb 82, Tohopeka.
Smith, Watt Francis, mc Graffenburg 54, cb 82, Thaddeus.
Vines, George Washington, mc univ Tulane 72, cb 82, Dadeville.
Ward, Lucius Cincinnatus, ng, cb 82, Daviston.
Total, 22.

PHYSICIANS NOT MEMBERS OF THE SOCIETY

Banks, Joseph W., mc Alabama 90, cb —, Jackson's Gay.
Shepard, Philip Madison, mc Graffenburg 54, cb 82, Dadeville.
Spier, Alfred Alexander, ng, cb 80, Dudleyville.
Total, 3.

Examinations—W. J. Harlan, mc univ Tulane 98, certificate granted.

TUSCALOOSA COUNTY MEDICAL SOCIETY.—Birmingham, 1877.

OFFICERS.

President, J. L. Williamson; Vice-President, J. L. Fant; Secretary, T. M. Leatherwood; Treasurer, T. M. Leatherwood; Health Officer, R. Neilson. Censors—J. L. Fant, S. Leach, T. M. Leatherwood, W. G. Somerville, J. L. Williamson.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Boudousque, Gabriel C., mc Alabama 95, cb Washington 97, Tuscaloosa.
Clifton, John Montgomery, mc Alabama 88, cb 88, Cottondale.
Cannon, Daniel Pugh, mc univ Vanderbilt cb Bibb 95, Coaling.
Carpenter, Nathan Herbert, mc univ Tulane 98, cb Green 98, Foster's.
Fant, Joseph Louis, mc South Carolina 76, cb Marengo 78, Tuscaloosa.
Faulk, William Mark, mc Alabama 97, cb Barbour 97, Tuscaloosa.
Hitchcock, Matthew Sims, mc univ Louisville 93, cb Dallas 93, Brookwood.
Jackson, Robert Dandridge, mc South Carolina 51, cb Dallas 78, Brookwood.
Leach, Sydney, mc univ Virginia 96, cb 97, Tuscaloosa.
Leatherwood, Timothy Miles, mc Alabama 91, cb 91, Tuscaloosa.
Little, John, mc univ Louisiana 69, cb 78, Tuscaloosa.
Mayfield, Surry Foster, mc univ Tulane 96, cb 96, Northport.

Nichols, Andrew Berry Cook, mc univ Philadelphia 69, cb 78, Tuscaloosa.
Perry, Samuel Miller, mc univ Vanderbilt 95, cb 95, Samantha.
Rau, George Reneau, mc univ of the South (Sewanee) 94, cb —, Tuscaloosa.
Searcy, James Thomas, mc univ New York 67, cb 78, Tuscaloosa.
Somerville, William Glassell, mc phy and surg New York 89, cb 89, Tuscaloosa.
Thurmond, W. H., mc ——— —, cb 96, Duncanville.
Trimm, James Lewis, mc Alabama 81, cb 81, Northport.
Williamson, James Lewis, mc univ Tulane 96, cb 96, Northport.
Total, 20.

Honorary Member.

Neilson, Robert, mc univ Georgia 51, cb 78, Tuscaloosa.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Asher, D. C., mc ——— —, cb 78, Cottondale.
Beatty, Douglass Pearson, mc univ New York —, cb 78, Hull.
Black, ———, mc —, cb —, Goethite.
Caldwell, Washington Jackson, ng, cb 84, Hull.
Clements, Alsey, ng, cb 78, Vance.
Doughty, Willis Burton, mc Louisville 96, cb Fayette 96, Falls.
Elrod, William Washington, ng, cb 78, Sipsey Turnpike,
Foster, Ezra, ng, cb 78, Brookwood.
Hagler, Prewett Lafayette, mc Alabama 91, cb 91, Tuscaloosa.
Mackey, Willis, mc——— —, cb Fayette 98, Oregonia.
McCord, Charles Richard, ng, cb 80, Oregonia.
Olive, George Washington, mc Alabama 82, cb 83, New Lexington.
Patterson, Madison Knox, mc univ Tulane 91, cb Green 91, Foster's.
Russey, James W., mc Louisville 76, cb —, Cottondale.
Sellers, E. M., me —, cb —, Milldale.
Taylor, William Thomas, mc Alabama 93, cb Green 93, Hickman.
Thompson, James W., ng, cb —, Taylorsville.
Toomey, Mark Anthony, ng, cb 78, Pearl.
Weaver, George Augustus, (col) mc univ Howard 97, cb 98, Tuscaloosa.
Wilkinson, J. G., mc —— —, cb —, Humphreys.
Total, 20.

Moved into the county—Nathan Herbert Carpenter, from Greene county to Foster's; George Reneau Rau, from Tennessee to Tuscaloosa; Prewitt Lafayette Hagler, from Sumpter county to Tuscaloosa; James W. Russey, from Chattanooga, Tenn., to Cottondale; J. G. Wilkinson, from Pickens county to Humphrey.

Moved out of the county—J. Buckner Killebrew, from Tuscaloosa to Kentucky.

Deaths—William Hester, mc univ New York 69, cb Tuscaloosa 78, Feb. 12, 1899, of apoplexy; Nicholas Perkins Marlowe, mc Jefferson 57, cb 78, September 1, 1898, of empyema; John Branham Read, mc univ Louisiana 46, cb 78, January 20, 1899, of old age.

WALKER COUNTY MEDICAL SOCIETY—Mobile, 1876.

OFFICERS.

President, W. C. Rosamond; Vice-President, W. M. Cunningham; Secretary, D. M. Davis; Treasurer, D. M. Davis; Health Officer, A. M. Stovall. Censors—J. A. Goodwin, W. C. Rosamond, A. M. Stovall, W. L. Gravlee, C. C. Jackson.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Ballenger, Joseph William, mc univ Vanderbilt 84, cb Cullman 87, Carbon Hill.
Camak, David Hubbard, old law 71, cb 84, Jasper.
Cunningham, William M., mc univ Vanderbilt 84, cb 84, Corona.
Davis, Daniel M., mc Atlanta 94, cb 94, Cordova.
Deweese, Thomas Peters, mc univ Vanderbilt 85, cb 85, Gamble Mines.
Goodwin, Joseph Anderson, mc Alabama 74, cb 78, Jasper.
Gravlee, William Lewis, mc univ Nashville 82, cb 82, Patton Junction.
Guilder, George S., mc Alabama 94, cb 94, Galloway.
Hendon, Albert Lucretius old law 78, cb 78, Townley.
Jackson, Charles Beuford, mc Atlanta 85, cb Tallapoosa 85, Horse Creek.
Manasco, John, old law 76, cb 81, Townley.
Manasco, Titus, mc Memphis Hospital 96, cb 96, Townley.
Odum, James Newton, mc Memphis Hospital 94, cb 94, America.
Rosamond, William Cooper, old law, 55, cb 81, Jasper.
Stovall, Andrew McAdams, mc Louisville 80, cb 81, Jasper.
Total 15.

PHYSICANS NOT MEMBERS OF THE SOCIETY.

Dearth, James Kitridge, ng, cb 88, Jasper.
Gallagher, Larkin, mc Alabama 95, cb 95, Eldridge.
Lynn, John Wesley, mc Atlanta 60, cb 81, Carcon Hill.
Masterson, William T., mc univ Louisville 91, cb Franklin 91, Oakman.
Miller, John M., mc univ Vanderbilt 85, cb 85, Cordova.
Phillips, Alfred B., univ Vanderbilt 85, cb 85, Horse Creek.
Stephenson, Hugh Watson, mc Alabama 80, cb Lawrence 88, Oakman.
Woodson, John A., univ Vanderbilt 92, cb 93. Coal Valley.
Woodson, Landon Aubry, univ Virginia 61, cb 91, Patton.
Total, 9.

WASHINGTON COUNTY MEDICAL SOCIETY—Tuscaloosa, 1887.

OFFICERS.

President, J. Gordon; Vice-President, J. W. Wood; Secretary, F. A. Webb; Treasurer, F. A. Webb; Health Officer, W. E. Kimbrough. Censors—John Gordan, W. C. McCanon, Charles LeBaron.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Gordon, John, mc Ohio 66, cb 87, Healing Springs.
Kimbrough, William E., mc univ Alabama —, cb 87, St. Stephens.
LeBaron, Charles, mc Alabama 89, cb 96, Yellow Pine.
McCanon, Campbell Wallace, mc phy and surg Keokuk, Iowa 80, cb. 96, Deer Park.
Shoemaker, Walton Worthy, mc Alabama 92, cb 92, Frankville.
Webb, Francis Asbury, mc Alabama 81, cb 91, Calvert.
Wood, John Wesley, mc univ Virginia 60, cb 87, Healing Springs.
Total, 7.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Collier, T. E., mc ——— —, cb —, Koenton.
Palmer, Leroy, mc ——— —, cb —.
Total, 2.

Physicians moved out of the county—A. P. Webb, from Fairford to Atmore; ——— Person, from Vinegar Bend to Mississippi.

*WILCOX COUNTY MEDICAL SOCIETY—Eufaula, 1887.

OFFICERS.

President, J. P. Jones; Vice-President, L. E. Starr; Secretary, R. H. Kilpatrick: Treasurer, R. H. Kilpatrick; Health Officer, R. H. Kilpatrick. Censors—L. E. Starr, J. J. Harris, W. M. Burroughs, A. B. Curtis, W. T. Purnell.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Adams, David, mc Georgia 68, cb 81, Pine Apple.
Benson, James C., mc Alabama 87, cb 87, Camden.
Bonner, James Isaac, mc Alabama 78, cb 79, Rosebud.
Burroughs, William M., mc univ Tennessee 91, cb Clarke 92, Pine Hill.
Curtis, Alonzo Bittle, mc Alabama 79, cb 82, Lower Peach Tree.
Curtis, Christopher Columbus, mc Alabama 82, cb 82, Lower Peach Tree.
Dale, William Bonner, mc univ Louisiana 61, cb 79, Allenton.
Gaston, David Finis, mc univ Louisiana 82, cb 82, Gastonburg.
Godbold, John Calhoun, mc Alabama 79, cb 79, Nellie.
Haddox, William Thomas, mc univ Louisiana 58, cb 79, Pine Hill.
Harris, John James, mc univ New York 88, cb Tuscaloos a 88, Furman,

James, John Paul, mc univ Louisiana 61, cb 82, Camden.
James, Joseph Harvey, mc univ Louisville 80, cb 82, Allenton.
Jenkins, Thomas Griffin, mc univ Louisiana 48, cb 79, Camden.
Jones, Thomas Warburton, mc phy and surg New York 90, cb 90, Camden.
Kilpatrick, Rufus Hall, mc Alabama 88, cb 88, Camden.
Kimbrough, Franklin Flavius, mc Alabama 90, cb 90, Camden.
Kimbrough, John Henry, mc Alabama 94, cb 94, Catherine.
Lee, Thomas, mc South Carolina 57, cb 80, Furman.
McDaniel, Edward Davies, mc South Carolina 57, cb 79, Camden.
Palmer, Ransom Dabney, mc univ Louisiana 86, cb 86, Furman.
Purifoy, John Howard, mc Jefferson 59, cb 81, Furman.
Purnell, William Thomas, mc Alabama 76, cb 79, Prairie Bluff.
Ramsey, David Wardlaw, mc univ Louisiana 70, cb 78, Pine Apple.
Spurlin, George Green, mc univ Louisiana 92, cb 92, Camden.
Starr, Lucius Ernest, mc Alabama 61, cb 79, Camden.
Thigpen, Jefferson, mc univ Louisville 93, cb 94, Furman.
Watson, William Waldred, mc univ Virginia 87, cb 87, Furman.
Wall, Richard Albert, mc univ Tulane 94, cb Butler 94, Ackerville.
Total, 29.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Cole, William W., mc univ Pennsylvania 50, cb —, Snow Hill.
Cook, Samuel Benjamin H., ng, cb 85, Pine Hill.
Hawthorne, Samuel McC., mc Alabama 89, cb —, Pine Apple.
Kimbrough, W. E., mc univ Louisiana —, cb —, Pine Hill.
King, Edward Doak, mc —— —, cb —, Lower Peach Tree.
Lee, John Francis, mc univ Nashville 80, cb 83, Allenton.
Williams, W. H., mc ——— —, cb Clarke —, Sunny South.
Total, 7.

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*NOTE.—As no report has been received from Wilcox county this year, the report for 1898 is here reproduced.

WINSTON COUNTY MEDICAL SOCIETY—Montgomery, 1888.

OFFICERS.

President, W. R. Bonds; Vice-President, A. S. Palmer; Secretary, H. C. Johnson; Treasurer, H. C. Johnson; Health Officer, J. C. Taylor. Censors—J. C. Taylor, W. R. Bonds, H. C. Johnson, A. S. Palmer.

NAMES OF MEMBERS WITH THEIR COLLEGES AND POST-OFFICES.

Bonds, William Riley, mc Alabama 92, cb 92, Double Springs.
Johnson, Harvey Calaway, mc Alabama 85, cb 85, Nauvoo.
Palmer, Alexander S., ng Marion, —, cb 89, Natural Bridge.
Taylor, Joseph Calhoun, mc Alabama 88, cb 89, Haleysville.
Total, 4.

PHYSICIANS NOT MEMBERS OF THE SOCIETY.

Adkins, William Riley, old law, cb Tuscaloosa 78, Double Springs.
Carroll, David, old law, cb Blount, 78, Double Springs.
Hood, John Wesley, old law, cb 90, Addison.
Roden, Benjamin Wesley, old law, cb Marion 89, Haleysville.
Total, 4.

Death—William I. Gravlee, ng, cb 91, Lynn.

THE ROLL OF THE COLLEGE OF COUNSELLORS.

REVISION OF 1899.

THE GRAND SENIOR LIFE COUNSELLORS.

Abernathy, William Henry, Tinela—Montgomery session.....1875
Furniss, John Perkins, Selma—Mobile session.....1876
Gaines, Vivian Pendleton, Mobile—Selma session.....1879
Gaston, John Brown, Montgomery—Montgomery session.....1875
Hogan, Samuel Mardis, Montgomery—Montgomery session.....1875
Jackson, Robert Dandrige, Brookwood—Tuscaloosa session.....1873
Jackson, Walter Clark, Montgomery—Tuscaloosa session.....1873
Ketchum, George Augustus, Mobile—Tuscaloosa session.....1873
McKinnon, John Alexander, Selma—Mobile session.....1876
McKittrick, Adam Alexander, Evergreen—Tuscaloosa session....1873
Michel, Richard Frazer, Montgomery—Tuscaloosa session.....1873
Prince, Francis Marion, Bessemer—Birmingham session.....1877
Sanders, William Henry, Mobile—Eufaula session.....1878
Starr, Lucius Ernest, Camden—Selma session.....1874
Total, 14.

THE GRAND SENIOR COUNSELLORS.

Baldwin, Benjamin James, Montgomery—Anniston session.....1886
Bragg, Shirley, Montgomery—Greenville session 1885
Brockway, Dudley Samuel, Livingston—Mobile session 1882
Cason, Davis Elmore, Ashville—Huntsville session.....1880
Fletcher, Richard Matthew, Sr., Huntsville—Montgomery session.1881
Franklin, Charles Higgs, Union Springs—Mobile session.....1882
Goggans, James Adrian, Alexander City—Birmingham session...1888
Goode, Rhett, Mobile—Mobile session 1889
Goodwin, Joseph Anderson, Jasper—Mobile session.....1882
Harlan, John Jefferson, Hackneyville—Montgomery session 1888
Hayes, Robert Hughes, Union Springs—Huntsville session.....1880
Hill, Luther Leonidas, Montgomery—Montgomery session.....1888
Huggins, Jacob, Newbern—Selma Session.....1884
Inge, Henry Tutwiler, Mobile—Greenville session 1885
Jay, Andrew, Evergreen—Mobile session.....1882
Jones, Capers Capehart, East Lake—Montgomery session.....1881
Kendrick, Joel Cloud, Greenville—Mobile session 1882
LeGrand, John Clark, Birmingham—Mobile session.....1889
Lowry, Samuel Hickman, Huntsville—Greenville session.....1885

Maréchal, Edwin Lesley, Mobile—Mobile session 1889
Nolen, Abner Jackson, New Site—Anniston session.....1886
Reddeu, Robert James, Sulligent—Tuscaloosa session.....1887
Robertson, Thaddeus Lindlay, Birmingham—Montgomery session.1881
Searcy, James Thomas, Tuscaloosa—Selma session.....1884
Sholl, Edward Henry, Birmingham—Huntsville session.....1880
Sledge. William Henry, Mobile—Mobile session.....1882
Stovall, Andrew McAdams, Jasper—Mobile session..... 1882
Thetford, William Fletcher, Talladega—Montgomery session....1881
Thomas, James Grey, Mobile—Huntsville session.....1880
Trent, Powhatan Green, Roanoke—Selma session.....1884
Whaley, Lewis, Birmingham—Anniston session.....1886
Wheeler, William Camp, Huntsville—Montgomery session.....1888
Wilkerson, Wooten Moore, Montgomery—Birmingham session...1883
Total, 33.

THE SENIOR COUNSELLORS.

Andrews, Glenn, Montgomery—Selma session.....1893
Bell, Walter Howard, Oxford—Birmingham session.....1894
Blake, Wyatt Heflin, Wetumpka—Montgomery session.....1892
Bondurant, Eugene DuBose, Mobile—Birmingham session.....1894
Brown, George Summers, Birmingham—Birmingham session....1894
Cameron, Matthew Bunyan, Sumterville—Selma session.....1893
Coley, Andrew Jackson, Alexander City—Huntsville session.....1891
Cunningham, Russell McWhorter, Birmingham—Selma session..1893
DeWeese, Thomas Peters, Gamble Mines—Birmingham session.. 1890
Duggar, Reuben Henry, Gallion—Montgomery session 1892
Gay, Samuel Gilbert, Selma—Selma session 1893
Harper, Robert Franklin, Ozark—Birmingham session.....1894
Heacock, John William, Alpine—Huntsville session.....1891
Heflin, Wyatt, Birmingham—Selma session.....1893
Hill, George Armstrong, Wynette—Birmingham session.....1894
Hunter, Henry Mitchell, Union Springs—Selma session.....1893
King, Goldsby, Selma—Selma session.....1893
McCants, Robert Beall, Faunsdale—Selma session.....1893
McLaughlin, James Madison, Springville—Birmingham session ..1894
Moody, Henry Altamont, Bailey Springs—Birmingham session.. 1894
Moon, William Henry, Good Water—Selma session.....1893
Parke, Thomas Duke, Birmingham—Selma session.....1893
Perry, Henry Gaither, Greenville—Birmingham session 1894
Quin, William Everett, Fort Payne—Birmingham session.....1894
Riggs, Edward Powell, Birmingham—Birmingham session.....1894
Williams, John Harford, Columbiana—Birmingham session.....1894
Watkins, Isaac LaFayette, Montgomery—Selma session 1893

Whitfield, Bryan Watkins, Demopolis—Montgomery session.....1892
Wilkerson, Charles A., Marion—Birmingham session.....1890
Wilkinson, John Edward Prattville—Montgomery session.....1892
Total, 30.

THE JUNIOR COUNSELLORS.

Brannon, Henry Lee, Eufaula—Selma session.....1897
Bennett, Benjamin Franklin, Clayton—Birmingham session.....1898
Davis, William Elias Brownlee, Birmingham—Mobile session....1895
Desprez, Louis Willoughby, Russellville—Mobile session.....1895
Dixon, John, Fayetteville—Selma session.....1897
Dryer, Thomas Edmund, Huntsville—Birmingham session.....1898
Frazer, Tucker Henderson, Mobile—Mobile session.....1895
Goodman, Duke William, Mobile—Selma session.....1897
Graham, William Alexander, Fayette—Selma session.....1897
Harlan, Aaron LaFayette, Alexander City—Birmingham session.1898
Harrison, William Groce, Talladega—Montgomery session.....1896
Henley, Albert Thomas, Birmingham---Birmingham session.....1898
Howle, James Augustus, Jordan—Mobile session.....1895
Hill, Robert Sommerville, Montgomery—Birmingham session...1898
Johnston, Louis William, Tuskegee—Mobile session.....1895
Jones, Julius, Rockford--Montgomery session.....1896
Jones, Edward Spears, Gadsden—Selma session.....1897
McCain, William Jasper, Livingston—Birmingham session.....1898
McEachern, John Adolphus, Brundidge—Selma session.....1897
Moody, Fleming Isaac, Dothan—Montgomery session.....1896
Pearson, Benjamin Rush, Montgomery—Birmingham session....1898
Robinson, Thomas Franklin, Blocton—Montgomery session.....1896
Sims, Albert Gallatin, Renfroe--Birmingham session.....1898
Sutton, Robert Lee, Orrville—Mobile session.....1895
Swann, Joseph Charles, Wedowee—Mobile session.....1895
Waller, George Platt, Montgomery—Montgomery session.....1896
Whitfield, James Bryan, Demopolis—Montgomery session.....1896
Wyman, Benjamin Leon, Birmingham—Selma session.....1897
Total, 28.

THE COUNSELLORS ELECT.

Bancroft, Joseph Dozier, Sumterville, Sumter county.
Blair, Hugh Walter, Sheffield, Colbert county.
Gaston, Joseph Lucius, Montgomery, Montgomery county.
Guice, Charles Lee, Harris, Barbour county.
Henderson, Stephen Cory, Brewton, Escambia county.

Justice, Oscar Suttle, Central, Elmore county.
Pride, William T., Madison, Madison county.
Warren, Benjamin Stewart, Clayton, Barbour county.
Welch, Samuel Wallace, Alpine, Talladega county.
Total, 9,

SUMMARY.

Grand Senior Life Counsellors	14
Grand Senior Counsellors	33
Senior Counsellors	30
Junior Counsellors	28
Counsellors Elect	9
Active Counsellors	100

THE ROLL OF THE COLLEGE OF COUNSELLORS BY CONGRESSIONAL DISTRICTS.

On this roll the names of the counsellors are given by congressional districts. It is intended to serve as a guide in the election of new counsellors with the view to the distribution of them in approximate proportion to the number of members in the several districts. It is not considered to be good policy, and it is not considered to be fair and right, to give a few large towns greatly more than their pro rata share of counsellors. The calculations are based on the nearest whole numbers.

FIRST DISTRICT.

Names of Counsellors.—E. D. Bondurant, T. H. Frazer, D. W. Goodman, Rhett Goode, H. T. Inge, E. L. Maréchal, R. B. McCants, W. H. Sledge, J. G. Thomas, B. W. Whitfield, J. B. Whitfield.

Choctaw,	members	9	counsellors		0
Clarke,	"	17	"		0
Marengo,	"	23	"		3
Mobile,	"	37	"		8
Monroe,	"	13	"		0
Washington,	"	7	"		0
Totals		106			11

THE SECOND DISTRICT.

Names of Counsellors.—Glenn Andrews, B. J. Baldwin, S. Bragg, L. L. Hill, R. S. Hill, A. Jay, J. C. Kendrick, J. A. McEachern, B. R. Pearson, H. G. Perry, G. P. Waller, I. L. Watkins, W. M. Wilkerson, J. L. Gaston, S. C. Henderson.

Baldwin,	members	7	counsellors		0
Butler,	"	18	"		2
Conecuh,	"	17	"		1
Covington,	"	6	"		0
Crenshaw,	"	17	"		0
Escambia,	"	9	"		2
Montgomery,	"	51	"		9
Pike,	"	19	"		1
Wilcox,	"	29	"		0
Totals		173			15

THE THIRD DISTRICT.

Names of Counsellors.—B. F. Bennett, H. L. Brannon, C. H. Franklin, R. F. Harper, R. H. Hayes, H. M. Hunter, F. I. Moody, B. S. Warren, C. L. Guice.

Barbour,	members	19	counsellors	4
Bullock,	"	20	"	3
Coffee,	"	14	"	0
Dale,	"	15	"	1
Geneva,	"	14	"	0
Henry,	"	21	"	1
Lee,	"	11	"	0
Russell,	"	12	"	0
Totals		126		9

THE FOURTH DISTRICT.

Names of Counsellors.—W. H. Bell, J. Dixon, S. G. Gay, W. G. Harrison, J. W. Heacock, G. A. Hill, G. King, A. G. Sims, R. L. Sutton, W. F. Thetford, J. H. Williams, S. W. Welch.

Calhoun,	members	21	counsellors	1
Chilton,	"	11	"	0
Cleburne,	"	14	"	0
Dallas,	"	27	"	3
Shelby,	"	17	"	1
Talladega,	"	22	"	7
Totals		112		12

THE FIFTH DISTRICT.

Names of Counsellors.—W. H. Blake, A. J. Coley, J. A. Goggans, A. L. Harlan, J. J. Harlan, J. A. Howle, L. W. Johnston, J. Jones, W. H. Moon, A. J. Nolen, J. C. Swann, P. G. Trent, J. E. Wilkinson, O. S. Justice.

Autauga,	members	7	counsellors	1
Chambers,	"	18	"	0
Clay,	"	14	"	0
Coosa,	"	12	"	2
Elmore,	"	16	"	3
Lowndes,	"	29	"	0
Macon,	"	8	"	1
Randolph,	"	24	"	2
Tallapoosa,	"	22	"	5
Totals		145		14

THE SIXTH DISTRICT.

Names of Counsellors.—D. S. Brockway, M. B. Cameron, T. P. Deweese, W. A. Graham, J. A. Goodwin, W. J. McCain, R. J. Redden, J. T. Searcy, A. M.,Stovall, J. D. Bancroft.

Fayette,	members	8	counsellors	1
Greene,	"	16	"	0
Lamar,	"	12	"	1
Marion,	"	10	"	0
Pickens,	"	19	"	0
Sumter,	"	15	"	4
Tuscaloosa,	"	21	"	1
Walker,	"	15	"	3
Totals		116		10

THE SEVENTH DISTRICT.

Names of Counsellors.—D. E. Cason, L. W. Desprez, E. S. Jones, J. M. McLaughlin, W. E. Quinn.

Cherokee,	members	13	counsellors	0
Cullman,	"	13	"	0
DeKalb,	"	14	"	1
Etowah,	"	12	"	1
Franklin,	"	17	"	1
Marshall,	"	12	"	0
St. Clair,	"	8	"	2
Winston,	"	4	"	0
Totals		93		5

THE EIGHTH DISTRICT.

Names of Counsellors.—T. E. Dryer, R. M. Fletcher, S. H. Lowry, H. A. Moody, W. C. Wheeler, H. W. Blair, W. T. Pride.

Colbert,	members	10	counsellors	1
Jackson,	"	12	"	0
Lauderdale,	"	14	"	1
Lawrence,	"	16	"	0
Limestone,	"	13	"	0
Madison,	"	26	"	5
Morgan,	"	12	"	0
Totals		103		7

THE NINTH DISTRICT.

Names of Counsellors.—G. S. Brown, R. M. Cunningham, W. E. B. Davis, R. H. Duggar, Wyatt Heflin, A. T. Henley, Jacob Huggins, C. C. Jones, J. C. LeGrand, T. D. Parke, E. P. Riggs, T. L. Robertson, T. F. Robinson, E. H. Sholl, Lewis Whaley, C. A. Wilkerson, B. L. Wyman.

Bibb,	members	16	counsellors	1
Blount,	"	11	"	0
Hale,	"	13	"	3
Jefferson,	"	91	"	12
Perry,	"	8	"	1
Totals		139		17

GENERAL SUMMARY.

The whole number of members in the State is 1,117, and the whole number of counsellors is 100. This gives one counsellor for every 11.17 members. For convenience, we say one counsellor for every 11 members.

The first district, with 106 members and 11 counsellors, has one more counsellor than it is entitled to.

The second district, with 173 members and 15 counsellors, has one counsellor less than it is entitled to.

The third district, with 126 members and 9 counsellors, has two counsellors less than it is entitled to.

The fourth district, with 112 members and 12 counsellors, has two counsellors more than it is entitled to.

The fifth district, with 145 members and 14 counsellors, has the number of counsellors that it is entitled to.

The sixth district, with 116 members and 10 counsellors, has the number of counsellors that it is entitled to.

The seventh district, with 93 members and 5 counsellors, has three counsellors less than it is entitled to.

The eighth district, with 103 members and 7 counsellors, has two counsellors less than it is entitled to.

The ninth district, with 139 members and 17 counsellors, has four counsellors more than it is entitled to.

ROLL OF CORRESPONDENTS.

Revision of 1899.

Bozeman, Nathan, M. D., New York.....1889
Garnett, A. F., M. D., Hot Springs, Ark.....1875
Hoffman, John Richardson, M. D., Athens, Ala.....1890
Mitchell, William Augustus, M. D., Eufaula, Ala.....1891
Moses, Gratz A., M. D., St. Louis, Missouri.....1874
Osborn, Thomas Childress, M. D., Cleburne, Texas.....1885
Peavy, Julius Franklin, M. D., Ashville, N. C.....1899
Rorex, James Polk, M. D., Scottsboro, Ala.....1891
Summers, Thomas O., M. D., Waukeshá, Wis.....1875

THE ROLL OF OFFICERS.

Revision of 1899.

PRESIDENT:

John Clarke LeGrand, M. D.....Birmingham.

VICE-PRESIDENTS:

Senior—Samuel Hickman Lowry, M. D.....Huntsville.
Junior—Samuel Gilbert Gay, M. D. .....Selma.

SECRETARY:

George Platt Waller, M. D.....Montgomery.
(Term expires 1903.)

TREASURER:

Henry Gaither Perry, M. D.....Greenville.
(Term expires 1903.)

THE BOARD OF CENSORS AND COMMITTEE OF PUBLIC HEALTH:

Sholl, Edward Henry, Birmingham.....1899–1904
Andrews, Glenn, Montgomery 1899–1904
Furniss, John Perkins, Selma.....1898–1903
Searcy, James Thomas, Tuscaloosa.....1898–1903
Sanders, William Henry, Mobile (Senior Censor).....1897–1902
Maréchal, Edwin Leslie, Mobile (unexpired term).....1897–1902
*Baldwin, Benjamin James, Montgomery.....1896–1901
Franklin, Charles Higgs, Union Springs.....1896–1901
Ketchum, George Augustus, Mobile.....1895–1900
Robertson, Thaddeus Lindley, Birmingham (unexpired term)1895–1900

ORATOR:

RHETT GOODE, M. D.....Mobile.

ALTERNATE ORATOR:

TUCKER HENDERSON FRAZER, M. D.....Mobile.

MONITOR:

GEORGE TILGHMAN MCWHORTER, M. D .....Riverton.

HISTORIAN:

MATHEW BUNYAN CAMERON, M. D.....Sumterville.

JEROME COCHRAN LECTURER:

WILLIAM OSLER, M. D., L. L. D.....Baltimore.

STATE HEALTH OFFICER:

WILLIAM HENRY SANDERS, M. D.....Mobile.
(Official residence, Montgomery.)
Term expires 1904.

PLACE OF MEETING—MONTGOMERY.
Time of Meeting, Third Tuesday in April, 1900.

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*Since the Association adjourned, Dr. B. J. Baldwin has tendered his resignation as a member of the Board of Censors. The President has appointed Dr. Wooten Moore Wilkerson, Montgomery, to fill the vacancy until the next session of the Association.

SCHEDULE OF REGULAR REPORTERS.

Session of 1900.

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(1) EUGENE DUBOSE BONDURANT, M. D., Mobile—
Acute Anterior Poliomyelitis.

(2) WILLIAM MUDD JORDAN, M. D., Birmingham—
Broncho-Pneumonia in Adults.

(3) WILLIAM GROOE HARRISON, M. D., Talladega—
Some Recent Studies in the Diagnosis and Treatment of Fevers, with Special Reference to the So-called Typho-Malarial Type.

(4) JOHN DANIEL SINKLER DAVIS, M. D., Birmingham—
Surgery of the Brain.

(5) WILLIAM C. MAPLES, M. D., Scottsboro—
Prevention of Tuberculosis.

(6) WILLIAM D. GAINES, M. D., LaFayette—
The Study of Gallstones.

(7) CHARLES WALTER WILKERSON, M. D., Montgomery—
Uric Acid.

(8) CUNNINGHAM WILSON, M. D., Birmingham—
Cerebro-Spinal Meningitis.

(9) OSCAR DOWLING, M. D., Mobile—
Simple Inflammation of the Eye as Observed by a Busy Practitioner.

(10) DYER FINDLEY TALLEY, M. D., Birmingham—
Fistula in Ano.

(11) WILLIAM WADE HARPER, M. D., Selma—
Entero-Colitis of Infants.

(12) WYATT HEFLIN, M. D., Birmingham—
Surgery of the Lacerated Cervix and Perineum.

(13) HENRY ALTAMONT MOODY, M. D., Bailey Springs.
Chronic Malarial Poisoning

(14) THOMAS EDWIN DRYER, M. D., Huntsville—
Difficult Labors and their Management.

SCHEDULE OF THE ANNUAL SESSIONS AND PRESIDENTS SINCE THE RE-ORGANIZATION IN 1868.

Selma—Albert Gallatin Mabry 1868
Mobile—Albert Gallatin Mabry 1869
Montgomery—Richard Frazer Michel 1870
Mobile—Francis Armstrong Ross— 1871
Huntsville—Thomas Childress Osborn 1872
Tuscaloosa—George Earnest Kumpé 1873
Selma—George Augustus Ketchum 1874
Montgomery—Job Sobieski Weatherly 1875
Mobile—John Jefferson Dement 1876
Birmingham—Edward Davies McDaniel 1877
Eufaula—Peter Bryce 1878
Selma—Robert Dickens Webb 1879
Huntsville—Edmund Pendleton Gaines 1880
Montgomery—William Henry Anderson 1881
Mobile—John Brown Gaston 1882
Birmingham—Clifford Daniel Parke 1883
Selma—Mortimer Harvey Jordan 1884
Greenville—Benjamin Hogan Riggs 1885
Anniston—Francis Marion Peterson 1886
Tuscaloosa—Samuel Dibble Seelye 1887
Montgomery—Edward Henry Sholl 1888
Mobile—Milton Columbus Baldridge 1889
Birmingham—Charles Higgs Franklin 1890
Huntsville—William Henry Sanders 1891
Montgomery—Benjamin James Baldwin 1892
Selma—James Thomas Searcy 1893
Birmingham—Thaddeus Lindlay Robertson 1894
Mobile—Richard Matthew Fletcher 1895
Montgomery—William Henry Johnston 1896
Selma—Barckley Wallace Toole 1897
Birmingham—Luther Leonidas Hill 1898
Mobile—Henry Altamont Moody 1899

THE SCHEDULE OF THE ANNUAL ORATORS.

Gaston, John Brown—Mobile session 1869
Ketchum, George Augustus—Montgomery session 1870
Anderson, William Henry—Mobile session 1871
Weatherly, Job Sobieski—Montgomery session 1872
Jordan, Mortimer Harvey—Tuscaloosa session 1873
Seelye, Samuel Dibble—Selma session 1874
Ketchum, George Augustus—Montgomery session 1875
Michel, Richard Frazer—Mobile session 1876
Fournier, Edmund Henry—Birmingham session 1877
Riggs, Benjamin Hogan—Eufaula session 1878
Mitchell, William Augustus—Selma session 1879
Baker, Paul DeLacy—Huntsville session 1880
Baldridge, Milton Columbus—Montgomery session 1881
Bryce, Peter—Mobile session 1882
Sholl, Edward Henry—Birmingham session 1883
Sanders, William Henry—Selma session 1884
Searcy, James Thomas—Greenville session 1885
No oration delivered—Anniston session 1886
Huger, Richard Proctor—Tuscaloosa session 1887
Baldwin, Benjamin James—Montgomery session 1888
Coleman, Ruffin—Mobile session 1889
Inge, Henry Tutwiler—Birmingham session 1890
Riggs, Edward Powell—Huntsville session 1891
Wyman, Benjamin Leon--Montgomery session 1892
Andrews, Glenn—Selma session 1893
Blake, Wyatt Heflin—Birmingham session 1894
Cunningham, Russell McWhorter—Mobile session 1895
Maréchal, Edwin Leslie—Montgomery session 1896
Hill, Robert Sommerville—Selma session 1897
Harper, William Wade—Birmingham session 1898
Chapman, George Clarence—Mobile session 1899

OBITUARY RECORD.

BIBB COUNTY—Benjamin Franklin Jones, M. D., mc Miami 84, cb Jefferson 84. Died at Woodstock.

BULLOCK COUNTY—Groves Caldwell, M. D. mc univ Pennsylvania 45, cb 79. Died at Midway. N. M. Bledsoe, M. D., mc univ Nashville 57, cb 79. Died of septic pneumonia at Union Springs.

BUTLER COUNTY—William Hance Reynolds, M. D., mc Alabama 93, cb 93. Died at Runville. Conrad Wall. Sr., M. D., mc univ Nashville 59, cb 79.

CHEROKEE COUNTY—Barnabas Pace White, M. D., mc univ Georgia 59, cb 87. Died of mastoid disease at Spring Garden. Z. M. Little, M. D., mc —— cb —. Drowned.

CHILTON COUNTY—John Archibald McNeil, M. D., mc univ Tennessee 53, cb 86. Died at Jemison.

CLEBURNE COUNTY—Orlando Waters Shepard, M. D., mc Graffenburg 54, cb 84. Died February 17, 1899, of heart failure.

COLBERT COUNTY—Beverly Johnson, M. D., mc Nashville 98, cb 98. Died March, 1899, of typhoid fever.

CONECUH COUNTY—William Chesley Shaw, M. D., mc Alabama 85, cb 85. Died November 12th, 1898, of hemorrhagic malarial fever at Bellville.

DALE COUNTY—John R. Rice, M. D., mc Alabama (one course), cb Geneva 87. Died at Wicksburg.

DEKALB COUNTY—William Addison Elrod, M. D., ng, cb 89. Died at South Hill.

ELMORE COUNTY—Abner Norton, M. D., mc Alabama 88, cb 88. Died of pneumonia at Eclectic.

HALE COUNTY—William Harrison Owens, M. D. Died at Havana. Elisha Young, M. D., mc univ Jefferson 59, cb 78. Died Nov. 6, 1898, of heart disease, at Greensboro.

JACKSON COUNTY—James Harvey Boyd, M. D., mc univ Tennessee 67. Died January 31, 1899, of croupous pneumonia, at Scottsboro. LaFayette Derrick, M. D., ng. Died July 6th, 1898, at Woodville, of tuberculosis. David Kirby Langston, M. D. Died of acute

Gastritis. M. Graham Stephenson, M. D. Killed by cars. T. M. Arnold, M. D. Died at Pisgah of heart disease.

JEFFERSON COUNTY—Ella E. Barnes, M. D. Died June 14th, 1898, from operation for hystorectomy. William Condie Foster, M, D. Died Oct. 22, 1898, of Bright's disease.

LAUDERDALE COUNTY—James Albert Douglass, M. D.

LIMESTONE COUNTY—Nicholas Blackburn Wallace, M. D., mc Cincinnati 51, cb 78.

LOWNDES COUNTY—Cyrus N. Coleman, M. D., mc Alabama 97, cb 97, Mt. Willing.

MARENGO COUNTY—S. S. King, M. D., McKinley, died November 8, 1899, aged 75 years.

MOBILE COUNTY—Claudius Henry Mastin, Sr., M. D., mc univ Pennsylvania 49, died October 3, 1898; Samuel R. Olliphant, Sr., M. D., mc univ Louisiana 55, died March 3, 1899.

MONTGOMERY COUNTY—James Douglas, M. D., mc South Carolina 57, cb 78, Montgomery.

PERRY COUNTY—Wesley Nathan Mears, Cohan, M. D., died July 1, Old age.

PIKE COUNTY—Gustavus Hendrick, M. D., mc univ Pennsylvania 53, 1898. Brundidge, of softening of brain.

RANDOLPH COUNTY—Jasper David Liles, M. D.. mc univ Louisville 70, cb 85, Roanoke, February 13, 1897, of cardiac disease; Erastus Hood McLendon, M. D., mc Graffenburg 60, cb 79, Rock Mills, Mills, July 20, 1898, of cardiac dropsy.

SHELBY COUNTY—Henry Backus, M. D., honorary member.

ST. CLAIR COUNTY—George W. Bartlett, M. D., Easonville.

SUMTER COUNTY—James Hamilton Giles, M. D., mc Louisville 67, cb 78, Cuba, old age.

TALLADEGA COUNTY—Louis Whitfield Pitchford, M. D., mc Atlanta Southern 88, cb Cleburne 89, at Eastaboga, from typhoid fever; Robert Preston Steadham, M. D., mc Chattanooga 93, Cleburne 94, at Childersburg, from typhoid fever.

TUSCALOOSA COUNTY—William Hester, M. D., mc univ New York, 69, cb Tuscaloosa 78, February 12, 1869, of apoplexy; Nicholas Perkins Marlowe, M. D., mc Jefferson 57, cb 78, September 1, 1898, of empyema; John Branham Reed, M. D., mc univ Louisiana 46, cb 78, January 20, 1899, of old age.

WINSTON COUNTY—William I. Gravlee, M. D., ng, cb 91, Lynn.

THE APPENDIX

OF THE

Medical and Sanitary Dissertations

ND REPORTS.

THE ANNUAL ORATION.

By George Clarence Chapman, M. D., Birmingham.

Member of the Medical Association of the State of Alabama.

Mr. President, Gentlemen of the Medical Association of the State of Alabama, Ladies and Gentlemen:

It is with sensations of extreme trepidation that I appear before you to-night as the representative of the Medical Association of the State of Alabama; and it is also with sensations of peculiar pleasure that I represent this august body as its annual orator, for there are feelings within that we cannot describe in having the honor of being the representative of men who are "worthy and well qualified." There is also a feeling of exquisite pleasure that surcharges my being in having the privilege of making this address to the dwellers of this lovely city by the sea. Here where the soft breeze from the Gulf stream warms the earth and kisses the sky in one grand touch from nature's breath, and ere the moisture from her lips of love has been wiped away she is made to rejoice and weep tears of happiness over the

coming of still another touch of Divine unction in the perfume of magnolia and the lullaby from the murmuring waters at her feet. What a home for hope, what a home for happiness; what a beautiful spot for all the youthful romances that come crowding into the young heart full of love and life,—what an ideal place for that one whose heart is weary with the tumults of life's battle, and seeking rest in nature's everlasting arms can look out in silence undisturbed at God's great heaving bosom, seeming so anxious to lull to rest the soul made weary by toil, or, turning from the beautiful waters of the Gulf, they may seek recluse in the silent solitude of the forest and there commune with nature and nature's God. Added to all these surroundings and characteristics from nature's lavish hand, no city is more famous for her gallant men and noble women; and no city has given to the medical profession men of greater learning and more scientific investigation.

Then, gentlemen of the Medical Association of the State of Alabama, I deem you most fortunate in having the pleasure of holding your session among a people rich in intellect, rich in wisdom and blest with all the resources that come from God's bounteous hand; and ladies and gentlemen of this fair southern home, you have among you no ordinary body of workers, but you have among you men representing the health and happiness of every man, woman and child, from the iron ribbed hills of North Alabama to the pine forests and cotton fields of this, your own southern county.

Then, with the assurance of your interest in our work, I shall attempt to essay to you to-night some thoughts on the "FUTURE OF THE MEDICAL SCIENCE."

To do this intelligently it will be necessary to lift the veil from the shadows of the past, and penetrate into the mysteries of the dark ages,—the era of feudal des-

potism when learning was locked up in the convent, the closet and the castle, when man was the complete master of his fellow man and the chains of tyranny rattled on the arms of the slave,—then the light and power of knowledge were made more manifest by the great circle of darkness which surrounded them.

In those days of romance the infant was cradled amid the clash of arms and the tumult of battle, to him valor was virtue, and a knowledge of war was wisdom; then the aspiring youth knew no piety but patriotism, no science but superstition, and his education taught him that to conquer on the field of battle was the very essence of philosophy.

About this era arose the orders of knighthood, then learning became hereditary among them, and never was the might of mind so terribly triumphant.

The great Charles of Germany was their patron, and headed by the venerable Vallette they shook the throne of the incensed Solyman and bade defiance to the tyrants of Turkey. For six or seven hundred years they struck terror to the infidels and hung out their banner in the cause of Christianity. During that long period of despotism and decay they were the aegis of Europe and a shield to the Christian world against which the spear of oppression rattled in vain.

When Homer sang and Hesiod wrote Greece was ascending that pinnacle whence the flood of her glory gushed and still gleams upon the minds of men. When Seneca laid down the great principles of morality and Cicero shook the forum with the thunders of his eloquence, then Rome, the city of the Cæsars, flourished, and Virgil sang her the glory of the globe.

Visit the classic but profaned ruins of Rome and Athens and ask the genius of the place or the page of history

where now is the freedom immortalized by the phillippics of Demosthenes and the orations of Cicero? and the one and the other will answer "knowledge and science departed and liberty was exiled." Polished Greece therefore and imperial Rome owed their distinction, success and glory to learning; and alike, their downfall to the departure of the highest element of human thought. How important it is then, for every generation to grasp with hooks of steel every advantage offered for the cultivation and growth of their God-given faculties.

Advancing up the centuries, governments became more stable, liberal institutions were created, and the rust of ignorance gradually disappeared, and in these progressive streaks of mentality, the science of medicine shared. "There was truly an awakening in every department of knowledge, and along every line of study; it was as if the minds of men had been dormant and lost their power of receptivity and after a long period of drowsiness, awakened in a new atmosphere, amid new surroundings as if there had burst upon them a sudden appreciation of ability to do things hitherto undreamed of, and to acquire knowledge which had never before been possessed by any one. Once free from the shackles imposed by authority of the past, these minds severed their Gothic bonds and started forth in every direction with the ardor of youth and the interest of novelty all engaging in the general enterprise of erecting from an antique science a new temple to the mind in which to worship.

There has been a continual progress from the date of Adam's paradise all through the priestly ministrations, down to the Homeric era, but it required the great Æsculapius, Hippocrates, Galen and Aristotle to mould the science of medicine where Roman civilization would accept the theory as accurate in pointing out and diagnosing disease.

From this nucleus of correct science, backed by God-given genius, steady progress has been made until all the civilized world is familiar with the brilliant achievments of the nineteenth century.

And, ladies and gentlemen, no State in this great commonwealth can herald to the world with a sense of deeper pride the names of their investigators and leaders in medical science than can this, our own beloved Alabama. What a halo of glory clusters around the names of Sims, Bozeman and Wyeth? It was from their fertile minds and artful hands came some of the greatest achievments in all the history of medicine, it was through their labors that thousands of lives have been rescued from a miserable existence.

Delving into the intangible secrets of science men have worn their lives away and been left upon the shores of ingratitude like the storm driven craft, desolate and alone; but ever and anon you may hear the whisperings of memory as the pages of hope are turned by other hands beckoning to an age whose darkness was made luminous by the labors of this forgotten hero, and as these labors are recognized by the advancing host of progressive scien tists, the gaze of an admiring world is turned to their unknown benefactor and he is placed in history as one of the golden links in the chain holding the past to the present. Thus it is when the followers after truth in medical science are groping in the darkness of despair and clouded by the fogs of superstition, still clinging to their faith they look beyond, when, behold, a new light gleams in their pathway, and the unexplored future, once so dark and dreary, is now festooned with bright and beautiful pictures of fancy and its edges gleam with the golden tints of hope, for darkness hides away in deeper darkness as the first faint echo of the morning's

whisper; care, foreboding and anxiety in the human heart reach the extreme limit of discouraged doubt just as hope timidly seeks admission.

No pen can describe the sensations that thrill the soul of him who has labored hard and long when the cold hand of doubt removes its icy finger from his pulse and allows the sluggish blood of a dormant past to course with joyous leaps through every artery of his impulsive body. It is a singular yet true fact that almost every moulder of thought and action passes through the tedium of doubt and despair, hope or fear, before the flash light of success illumines his pathway with all the splendors of a well-earned victory.

We are sailors on the sea of life, and sometimes its gentle wavelets kiss our placid cheeks presaging a peaceful and delightful voyage, and sometimes its maddened surges wildly dash against our fevered brows, foreshadowing the mighty storms to be overcome.

The history of medical science shows that through all ages of the world, men have risen Titan like from the very dust of their vanquished state, bursting the fetters of defeat, and under the magical wand of a new inspiration have ascended to the summit of Parnassus, plucking success from the spear-proof crests of rugged danger, and at last reaping a harvest garnered with the brightest jewels of victory, and it is such as these that make history; without them the world would be dormant, science would be dead and all progress would be locked with fetters of ignorance and superstition. It is such as these that have brought from the past a science that has been through the ages clouded with superstition, dogmatism and ecclesiastical bigotry, and placed it high up on the mountain of human achievement, where the searchlight from its penetrating powers can radiate into the frozen regions of the north or into the torrid zones of the south.

It is such as these that have burst the bonds of unbelief and let free the contracted epicurean dreams of the ages. It is such as these that have opened wide the gates of science so that he who will may enter, and if he cannot reach the summit of glory, he may linger at its base and drink of the streams of knowledge and science as they gurgle by; and, when they reach the apex of their possibilities, hypocrisy will not bow at its sacred shrine, fear will not crouch, virtue will not tremble, superstition's feeble tapers will not burn, but reason will hold aloft her inextinguishable torch, while on the ever broadening brow of science will fall the roseate blushes of the coming morning of the better day.

No human mind can estimate the possibilities for good these lives accomplished, for science and christianity go hand in hand, and through the rapid moving of the centuries, there has been a harmonious concord of material prosperity as science has thrown the light into the future until a great revolution has swept over the world, breaking down established opinions, dissolving foundations on which historical faith has been built up, and charging the minds of the people with a battery of electrical dynamite that has exploded and torn to fragments the very tenets of the superstitions and dogmatisms of the past, changing all the great avenues of life. I would not make rude clamor at the temple doors of the past, but it is the hope and belief that the future of medical science will be more glorious in achievements in our generation than in all the ages of the past, for already that same spirit that marks material progress has seized the minds of myriads of earth's bravest men and set to work great afferent and efferent systems until it has linked forever the unknown to the known. And what is it that knowledge with scientific progress cannot do? It has sent out

ships white winged and smoke plumed traversing the seas; it has raised the pyramids of science and thrown world wide the beauties of art; it has held the winds in its fist and brought the lightnings in subjection to its feet; it has built great highways shot with shuttles of fire and steam and clasping a continent with a shining girdle; it has given to the world the fair pages fresh from the printers engine; it has wielded the sculptor's chisel and made the stricken marble grow to beauty; it has seized the painter's brush and made sunshine gather upon his canvass and life glow at his touch; it has stretched the telephonic cord from ocean to ocean and made a whispering gallery of the world; it has placed its cord in the mouth of the mighty deep and sent messages thousands of miles when the storms above and the currents beneath have threatened to choke its utterance.

The heavens glittering with the glory of God, the earth studded with ten thousand gems bow to this power and acknowledge the supremacy of the Godlike mind of man, and the time will come when science will throw its mighty arms around this old world and lift it up like ancient Eden, almost to heaven; and now, in an age like the present, so eminently mercenary and utilitarian in its charateristics, any influence or instrumentality is especially desirable which by cultivating the finer sensibilities, chastening the feelings, refining the taste by appealing to the æsthetic principles of our nature and developing the higher, holier, nobler impulses and aspirations of our moral and intellectual being will have a tendency to raise the mind above the engrossing cares of mere physical existence, to free it from the materializing influences of a sensual earth-born prudence, and to contract that epicurean utilitarianism which is the natural and almost inevitable consequence.

There are many dangers threatening the future of medical science. The murky clouds of advertising quacks hang heavy over the pathway of the young and timid; the black fogs of incompetency rise up to check the individual efforts of the educated and faithful, over the bulwarks of the future come thronging thick and fast these shapes of direful omen. Let us not shrink from the encounter, but let us stand up in one combined mass and roll back forever to the butcheries of Huns and vandals the black waves of ignorance and superstition that seek entrance at our doors.

To keep the future of medical science on the basis of highest excellence those who enter its study *must* be first qualified by a good literary education. It is for this attribute that I appeal to the citizens of Alabama to-night. For be assured that the educated Doctors are destined to exercise a dominant influence in their generation; they are to be the strength and stability of their times, the fund of intelligent and conservative life back upon which the world must cast itself as the bulwark of its liberties and the condition of future glory, then it will be that the worthiest will wear the crown, for we know there are certain great focal points of history toward which the lines of past progress have converged and from which have radiated the moulding influences of the future. Such is the position of medical science in the closing years of the 19th century.

Few, however, imagine that the destinies of mankind for centuries to come can be seriously affected, much less determined by the medical science of this generation. Few suppose that these years of peaceful prosperity in which we are quietly developing a continent are the pivot on which are turning the Nation's future; but we of this generation from the lofty heights of opportu-

nity look down on more than forty centuries, we stretch our hands into the future with power to mould the destinies of unborn millions, we of this generation occupy the Gibraltar of the ages which commands the world's future. The question is, what will we do with it? The widening waves of migration which milleniums ago rolled east and west from the valley of Euphrates meet to-day on our continent, and the combined mental forces of all humanity have merged into the present generation, with as many different creeds and traditions.

Medical science is the beautiful pioneer in the vanguard of the progress of the world, but should the day ever come when she shall choose to spread a table to crime, or to enshrine quackery upon her altars; should her creeds become dishonest, her representatives debased and corrupt, her standard of virtue a tradition and a sham, then, though the double ocean of thought sweep her illimitable shores their waves shall but flash to future generations a more sad, a more desolate and a more unending dirge. But should the representatives who are to be the standard bearers in the great and unexplored future take the highest summit of excellence as their ultimatum, then no power in earth or heaven could shake the foundations laid by the great pioneers in this glorious achievement, and then, though "Honor may be deemed dishonor, Loyalty be called a crime,"—yet, in the world's great unexplored future, when the impartial historian grasps his pen, the latent forces of a grand galaxy of illustrious heroes of honor and adherents of loyalty will arise from tombs of dark despair and behold the dawning of another millennium, for they have already rolled the stone from the sepulchre of progress and found therein angels clad in shining garments who have rendered superstition in every land as insecure as snow upon volcanic lips.

There are two great armies sweeping over the world. One of these bears upon its banner Christianity and has its worthy devotees from where the huge glaciers sweep the mountain gorge to where the rich breath of Cuban zephyrs fan the sun-tanned inmates of a southern clime. This army of the church militant has as its foeman, sin of a thousand degrees of blackness, to battle.

Yet, though all the powers of earth have combined against this army, it has steadily advanced on its victorious march through the ages.

The other one of these armies has for its mission the rescuing of humanity from the clutches of disease, yet it moves as noiselessly as the magic fingers of nature weave the garments of spring; no martial music accompanies the soft tread of these millions of earth's heroes, yet the new born babe, with its tiny note heralding its egress into a bright world and the joyous, happy smile of the young father and mother over their first-born to the oldest man whose feeble voice whispers gratitude for softening the pillow of death, bids this army move on. And what can it not accomplish? It has already saved millions of lives by vaccination; it has sent its messengers of cleanliness from continent to continent, washing away with antiseptic solutions old theories and verifying the truth that "cleanliness is next to Godliness," and allowing the surgeon to go with perfect confidence into the most vital structures without any fear or trembling; it has placed to the nostrils of suffering humanity an anæsthetic that lets the unfortunate victim rest as quietly as the sleeping infant upon its mother's breast; it has broken down the crude barriers of doubt in diagnosis and by the keen light of the microscope, made visible every germ that lays its destructive powers upon the economy; it has opened wide the

avenues of the dense tissues so that by the clear vision of the X rays foreign bodies may be located even in the remotest parts of the anatomical structure; it has made glad the hearts of millions of fond mothers in the discovery of Antitoxin, that saves her precious child from death by diptheria; it has wiped the cobwebs of doubt from the sky of Koch, and even now lends a roseate blush to the hopes of the hitherto hopeless consumptive, and breathes the warm breath of the 19th century achievements under her ribs of death; it has given aid alike to the poorest peasant in her hovel to the proudest queen upon her throne; it holds sacred alike the secret confidence of the desperado hiding in his mountain cave and the vesper chanting monk in his cloistered cell.

Though the standand bearers of this great army of relief have their work dissected by the keen knives of criticism, yet they are as unflinching in their adherence to duty as the great McDowell was when he performed the first laparotomy, when there was an armed mob outside waiting the result of the operation. And though the rapid moving of this army be at times impeded by the epicurean dreamers who think there is nothing more that can be accomplished; that every achievement has already been made in medical science, and nothing more remains to be done for the salvation of the human race from disease and death,—yet, amid it all, and, in it all, they are steadily delving deep into the mysteries of the unknown and bringing to the light of a waiting world these hidden treasures, and applying them for the relief of humanity, and though their discouragements may be many and doubts and forebodings throng around them thick and fast, yet heaven is auspicious to every courageous spirit; then when we lift the veil and penetrate the future we will see the representative of this army of medical science

amid the embattled foemen of the world, high upon the mountain of hope whose foundation is as firm as the rock of ages, beckoning to the world to listen to the onward movement of their work, then he will herald the achievements of science to a rescued race, for then, disease will be throttled by the touch of these master hands, and suffering will be relieved with greater skill and ease than has ever been dreamed of; the surgeon's knife will lose its horror because there is no pain following its use; then again we behold the representative of medical science on the very summit of achievement, holding aloft in one hand a beautiful banner, bearing upon its silken folds the flaming inscription "All for Humanity," while with the other he places to his lips a bugle whose blasts resounding throughout the world summons once more the clansmen to the defense of health and happiness; and like great flocks of birds homeward bound in their flight, they return to the ranks and all are raised and borne by the great current in its onward sweep, wandering and rippling with caressing waves around green islands, fragrant with the breath of flowers that never wither, so they will pass from stage to stage along the shining course of that bright river of hope broadening like a sea, and as its smooth eddies curl along their way they will bring old friends together, hands will be clasped in joy unspeakable, and the mother's arms will fold around the child she loves with greater security; then, through the misty veil we see the brood of hope divinely fair that rests on banks of fragrant flowers, or wandering among rainbow tints from the glory world from whose reign the eternal change that waits on growth and action shall proceed with everlasting concord, hand in hand, presenting to the entire world a spectacle grander than the fleets of mightiest admirals seen beneath the lifted smoke of battle, grander far than the serried tramp of armed men marching by tens of thousands to the music of an unjust glory.

THE MONITOR'S ADDRESS.

By Reuben Henry Duggar, M. D., Gallion, Ala.
Senior Counsellor of the Medical Association of the State of Alabama.

Mr. President, Fellow Members, Ladies and Gentlemen:

After bowing acknowledgments to our worthy President, which I now do, for the honor conferred in assigning to me the duties of "Monitor" on this occasion, I beg to invite your attention to The Varied and Reciprocal Relation between Physicians and the Public, as the theme for discussion.

The title, Doctor, signifying in the Latin tongue, a learned man, was originally applied to wise men, those who devoted themselves as students of nature and art, that is, so much of art as was then known. Learned men were believed to be possessed of peculiar, and even supernatural powers.

Generally men of means and capacity, they had leisure to avail themselves of many resources. Kings were their friends and wealth was at all times subservient. Whatsoever in life or art was curious or out of the common run was brought to their notice, for consideration and explanation. They were often styled philosophers, and received much homage. In the course of time, however, there arose divisions and distinctions, such as we moderns term specialties, or the taking up of separate and special subjects for study. So, we find the Priests assuming for themselves both medical and surgical work, believing no doubt, that as they administered in religious

matters, bodily imperfections might also be remedied, mind and body having been always considered so closely related.

Not earlier than the 15th century was the title "Doctor" interpreted as belonging strictly to the medical profession. Until that time the recognized title for medical men was "Master in Medicine" or "Master Regent."

In whatever age medical men have appeared, the prominent fact was always apparent that they were the servants of the people and many privileges were accorded them.

Physicians as a class are considered generally a very mixed body of men, good, bad, and indifferent; needing the prayers rather than the praises of the community. This as Mr. Lincoln would say "reminds me"—of a story told on an English clergyman, who did not keep *up-to-date* in what was going on in the world.

One Sunday morning he asked the good sexton—"Is the prayer for Parliament to be used to-day?" The sexton's reply came pat and prompt—"Well sir! I don't know; but better pray for them any way, they are a very precious bad lot."

However good or indifferent doctors may be, the public has always demanded their services, and will do so, as long as disease and pain exist.

How much then should they value the doctor, who serves them and their families, night and day, rain and shine, and so often at his own discomfort. Every established division of science has had its long pre-stage of obscure and fanciful hypothesis. Medical science does not stand alone in this respect. It too has had its myths and its mummeries,its fads and its fictions. Witchcraft, jugglery, and incantations have been invoked by their deluded advocates as means of cure. Even in these days of high culture we see about us quackeries

of the vilest sort, preying upon the credulity of the ignorant, and, I might say, of the apparently wise. Christian scientists,Osteopothists, sometimes upheld by state authority, although reasonably educated are seen promulgating the most glaring falsities; dupes duping dupes, monumental Babels arising from the frothy foundations of false theories,—scrolls and rolls of statistics attempting to verify vagaries of the most unblushing character, whilst grossest untruths

"Whirling thro' the air in circling eddies play."

It takes strong minds and solid men to dam the current against so much error, false teaching and seductive sophistry.

Never was there a time when so much harmony, professional brotherhood, and good ethical training were needed.

As I said once before to this Association, the physician, the one true to his calling, should be a representative man in mind, manners and morals, and, being such, his influence for good will be practically unbounded.

Although we may not always stand upon the very orthadox letter of the Code of Ethics, as promulgated by the American Medical Association, yet the organic law of that code is well known, and leaves no license for acts of doubtful propriety.

It not only prohibits physicians from employing secret nostrums, but declares that "in any way to promote the use of such nostrums is reprehensible."

In England, the College of Physicians has a legal right to inspect apothecary shops and therefore to determine, to some extent, the nature of their contents. The profession cannot be entirely emancipated from the state, nor the state from the profession.

In Germany, Italy, and some other European countries the civil authorities have control over pharmacies, and can impose a fine upon the proprietors if a specified list of well-known drugs of good quality be not kept in stock.

The subject of patronizing proprietary medicines has been freely discussed in the Profession, but that we should not certify to the use and benefit of such is plainly and strictly the meaning of the code. The slightest endorsement given may be construed into a thousand times its intended value, and thus our names brought into disrepute. Many a quackery thrives because we are not united in crushing it out of existence. Our faint-heartedness encourages its promoters in pushing it on the public. There is a Latin adage: "*Populus vult decipi decipiatur*,"—if the people wish to be deceived let them be deceived.

In the face of the classical authority, just quoted, we hold it to be the mission of the medical profession to expose deception and error on all proper occasions, and thus defend the people from imposition and fraud.

In other words the doctors should follow Shakspeare's advice to "to take up arms against a sea of troubles, and by opposing end them." To show the credulity of a large portion of mankind, the utter mendacity of another part, and still again the inconceivable ignorance of a few who are sometimes invested with power, we need only look back for a score of years to find the legislature of the great State of New York purchasing from a man named "Crouse" a secret remedy for the prevention and cure of hydrophobia, paying therefor the sum of three thousand dollars. This wonderful recipe was discovered to be only the rankest nonsense. R—Jawbone of a yellow dog, the false tongue of a young colt, verdigris, &c., mixed well and given in tablespoon-

ful doses twice daily. Had the members of the legislature been compelled to partake of the nauseous compound (provided they ever found it) it would have been a good lesson for succeeding generations.

Then, again, from the State of Connecticut, there came a certain "*Doctor*" Perkins with his "metallic tractors," each single instrument valued at twenty dollars, having gotten the fruitful endorsement of several hundred "clergymen," which materially pushed their reputation,—they finally reached the climax, when the *managers* of a very large city hospital required that the mighty "*tractors*" be tried on some "yellow fever cases," inmates of said hospital. Most fortunately for posterity the "yellow fever" killed or made infamous both the inventor and his pet "tractors." Very many of the older physicians can remember the name of "*Thompson*," Thompson with a "p"—the once noted and original herbalist and "New Schooler," whose "original think" and "theory of disease" was, that it was, "animal heat confined." For expelling this heat from the bodies of his patients his "*materia medica*" consisted of crude lobelia, red pepper and steam. He published a *medical journal* and 'tis said that his popularity was proven by its *three million subscribers*. Still our credulity was not satisfied, for Germany was invited to export a whole ship's cargo of "pathies," which came over in crowds—Homeopathy, Hydropathy, Mesmerism, Phrenology, etc. The same fields are teeming with fertility now for our amusement and delectation. A few more winters and summers to come and new "germinations" will appear, and many "*propagandists*" will seriously wish they had never attempted to propagate their "isms."

A conscientious physician should feel an obligation imposed upon him by the responsibility of his profession

to protect the untaught public from the consequences of its own folly.

"Noblesse Obligè" was a favorite quotation, often repeated by one whom this association loves to venerate, and with it as a fruitful text he was accustomed to offer wise advice, and inculcate noble ethical principles.

As a talisman of success it should be eternally inscribed upon our banner, for the genius of our departed "Grand Senior Censor" ever hovers over this Association like the brightest star that ever shone in a winter night.

The physician's intercourse with his patients will furnish him golden opportunities for establishing mutual and indissoluble bonds of sympathy and friendship. Thus, holding their confidence and respect, he is in a position to correct false impressions, and inform them of the true status of pretensions, fads, and follies.

The speaker was once so situated as to conclude that it was wise for a neighboring family to remove to another section of the country, whereupon the lady of the household stoutly refused, declaring "she would not go, unless she could carry her good physician with her." Her physician accepted the refusal as the highest compliment ever paid him.

As professional men having such close relationships with our patients, how are we to acquire the influence over them so often sought? The answer is, to deserve it. By studious habits, and constant attention to each individual patient, by personal sacrifices of our time and pleasure, and the closest investigation of every disease, we will merit and win their confidence.

I heard an old practitioner once give the following advice to a young friend, who had recently graduated: "Keep your office and your office will keep you." This, in a measure, may be correct, but ask the laity and they

may tell you somewhat differently. The public will quickly vote a man as offish and arrogant unless he mingles with the crowd to a certain extent. I do not mean by this that a man should be sycophantic, but there is a dignified middle course—neither too familiar nor too exclusive; especially avoiding the fawning that breeds contempt.

From the writings of the ancients we learn that even in their day regard was paid to the ethical relationship between physicians and the people. Paracelsus gives some very conservative and monitorial aphorisms, as good now as when formulated by their author nearly four hundred years ago. I quote some of them as follows: "A physician should not be harpy-like, and over-covetous, making a prey of his patient; should not give too much physic; should try medicinal diet, before medicinal cure, and not consult with too many different kinds of doctors, lest the patient be worse than better."

It is considered sometimes a great fault in a physician that such large fees are often charged; the public can not be brought to consider the facts, the how and wherefore. But could they for a sober second thought judge of the time spent in getting that professional knowledge, the cash expenditure for lectures, books, and the numberless needed instruments of the greatest value, and all the et ceteras of a busy, regular practitioner, the public might form some conception of the cost of this "experience and skill" of which they reap the benefit.

The following epigram of the 16th Century very aptly expresses sentiments, the intense humanity of which will be recognized as having survived to the present, without the loss of any of the vitality and truth that belonged to them as they leaped from the poetic brain of their author, and were crystallized into words:

"The physician like an angel seems
When brightly, he, in the sick-room beams,
And like unto a God is he
When safely 's cured the malady.
But in a different light we view
The Doctor, when his bill is due;
Our alter'd eyes, we at him level
As tho' he were the very d—l."

In this connection the admonition of the Right Rev. Bishop of Norwalk to his congregation is so complete, and just, and full of meaning, that I insert it here with the endorsement, I am sure, of all the doctors present. He rightly believes that whatever is worth having is worth paying for, and this should be binding in every walk of life. He says:

"In my Master's name I entreat you to remember that true medical men are the highest type of their class in the world; they are entrusted with the secrets of domestic life; they frequently die as martyrs to science; to suffering, to sympathy, to destitution. Believing this, my plea is that every unpaid medical bill be discharged generously, gracefully, cheerfully, and that whatever account must be deferred in payment, the last to be postponed is the account of him, who is the human agent who has brought us into the world, enables us to continue our work in life, and many a time risks his own for our protection."

In our professional life, as well as other duties, it is for us at all times to have before our eyes the "Golden Rule." Our weaknesses and our errors may be many and flagrant, yet society rule and discipline may be just and firm, without repulsive measures or wounding kind feelings. Physicians are not infallible, and may make unavoidable breaches of the code—going beyond propriety.

Some years ago the medical society of the county of New York appointed a Committee of Ethics. In eleven

months time there were reported one hundred and seventy-five charges against its county members. The complaints and causes were well studied, full time was taken and nothing rashly done, and when proper and authoritative explanations were made, it was found that all the cases might be and were amicably settled.

In this State the Board of Censors is our business committee and committee of ethics.

What duty owe we to the public? To see that the accessions to our ranks be men well drilled in the work—men fit for emergencies. The higher the order, the greater the accomplishments demanded; the stronger the foundations, the larger the superstructure may be builded. The men who formulated the laws that made Rome mistress of the world grew when each Roman was proud of the Empire. The most precious treasures of a country lie deposited in the spirits of her noble sons; such are the everlasting insurance companies of her grandeur and her greatness. It was the Rev. Lyman Beecher who once said: "No duty ever made him prouder, no glory greater, no honor he valued higher than that of being called the *father of noble sons*." It becomes us then through our colleges and universities, and the influence and control we may exert, to strive, with every effort, to bring about such a state of thoroughness in education and professional ethics, that posterity may enroll our names with the honored and call us blessed.

An intelligent public will ever have cause to appreciate the efforts put forth by the numerous medical institutions which have so considerately extended their terms of study,—an important step toward higher education—and the general public as well as the profession itself will share alike the honor and reward.

We recognize the fact that there are with us many eminent men, ranking high, self-taught, self-made men, who by dint of worry and work and pesistent striving have gained the topmost rung of the medical ladder. Due praise and honor should be theirs. No effort can be too earnest—no pains too great.

> "I like that man who faces what he must,
> With a step triumphant and a heart of cheer,
> Who fights the daily battle without fear,—
> Sees his hopes fail, yet keeps unfaltering trust—
> Nor loses faith in man,—but ever does his best."

The physician of this generation does not live blessed with eternal sunshine, nor does he dwell in beauteous twilights, nor is he lulled to rest in heavenly hammocks, gilt edged, and sky-woven—only to dream of peaceful bliss, but his life is spent in a practical world of close competitions, whose forces and facts like tufts of grass are eternally springing up before him, higher, broader, deeper and more obstructive year by year.

Brother Counsellors—for the perpetuity of this medical organization we must continue to strive. "The builder builded wiser than he knew."

It is only in an atmosphere of mutual trust, sympathy and respect that men can cultivate the gentle and manly virtues. There is an ethical trust in every effort of civilization; it is higher than politeness. Our education, our business relations, even our home-making is saturated with ethical relations.

Our Code of Ethics—like a civic law between man and man, is but a list of rules, to keep us hooked and buttoned together, bound with the silken cords of knightly honor and good fellowship. What more can I suggest to you fellow-members? The answer springs untrammelled to my tongue: Act justly and love mercy and we will continually be blessed.

HISTORIAN'S ADDRESS.

By John William Heacock, M. D., Alpine,

Senior Counsellor of the Medical Association of the State of Alabama.

Mr. President and Gentlemen of the Medical Association of the State of Alabama:

In these days of push and progress, more noticeable perhaps in the medical profession than in any other of the many vocations of our people, it may be well for us occasionally to forsake for a while the arduous duties of the busy practitioner, and by retrospection learn something of the results of our efforts as an organized body.

The Bible commends the wisdom of the man who, casting about to build a house, first, sits down and counts the cost to know if he shall be able to complete it. In accordance with this teaching it is easy to presume that the few noble and devoted physicians who first inaugurated the work of establishing a state organization sat down and considered well their resources and plans.

In the steady progress of its operation we find abundant encouragement to persevere in the great work, with the hope of completing the grand structure, whose foundation was laid more than half a century ago. In adhering to the time honored custom of this Association, it is with peculiar pleasure that we find ourselves again assembled in this historic "Gulf City" of our beloved State, which may be aptly called the cradle of the Medi-

cal Association of Alabama, as here it was born on the first day of December, 1847.

To those of us who have had our hearts in the great work of this organization, it is interesting and encouraging to note the wonderful progress that has been made, toward a consummation of its great ultimate object. The handful of brainy, determined, and devoted men, whose genius devised the plan and put in motion the machinery, could scarcely have cherished the hope that the seed they were then planting would, so soon, germinate and grow into such an abundant harvest.

It was said by Dr. Jerome Cochran (at the mention of whose name every doctor in Alabama should feel inclined to raise his hat in respect) that it is the object of this Association to regenerate the medical profession in Alabama, in its legal, ethical and educational relationships, and to elevate it to a higher position of dignity, influence and usefulness. What long and rapid strides have been made toward the attainment of this object may be learned by a retrospection of its work from its birth here, in 1847, or from its resurrection in Selma, in 1868, to the present time.

The Bryce Insane Asylum, that grand institution of the state, may be regarded an offspring of this Association, and with its more than a thousand patients, and superior management, stands up in testimony, and speaks eloquently of its good work. The laws regulating the practice of medicine in Alabama, under which charlatanism and quackery are fast disappearing, stand as monuments to its wisdom and as living witnesses to the progress that is being made. The code of ethics, once lightly esteemed and held by many as a bare sentiment, is now regarded as, not only the established sentiment of honor and fair dealing between brethren of a noble profession, but carries with it a moral force which gives it almost the efficacy of legal enactment.

Hygiene, sanitation, quarantine regulations, and others of the co-ordinate sciences, bear abundant evidence of the wonderful impetus given them by the influences brought to bear, either directly or indirectly, by this organization. But in the general work of this Association, its history exhibits nothing more encouraging to those who have been, and are still, laboring in the cause of organized medicine, than the marvellous strides that are being made in the direction of higher education. Under its influence, sustained by such laws as have been and will continue to be suggested to our legislators, and by the rules and regulations now adopted by all reputable medical colleges, the ignorant and unworthy doctor will, in a few years, be a creature of the past.

Nothing so swells the hearts of the old members of the profession, (whose opportunities perhaps have not been so good or abundant), with emotions of pride and hope, as to notice the younger men so full of enthusiasm, forging their way to the front, bending every energy to higher educational attainments, and to the elevation of their chosen profession to a higher plane of usefulnesss. On these rest our hope of the final triumph of this Association over all the difficulties and obstructions along its pathway.

And we are glad to submit it has just cause to be proud of its prospect, in being able to maintain its present high prestige and distinguished position among the state organizations of this country.

But to compile facts as to the work, progress, and achievements of this Association, while this would come clearly within the province of the historian, in this instance would be a work of supererogation, a rehearsal of transactions with which every member is already familiar. Other more facile and much abler pens have placed them on record.

It is made the special duty of the historian of this Association, to furnish memorial records of those of our brethren who have, within the last year, dropped by cause of death, from the ranks of our college of counsellors.

Scarcely a year of the last three decades has passed without its becoming the duty of some one to perform this melancholy service, and we submit that it is a most praise-worthy custom as well as duty we owe to those of the fraternity who have given their lives to the alleviation of the ills of humanity, and in doing so we have followed in the foot-steps of Him, who commanded the good Samaritan, opened the eyes of the blind, gave strength to the palsied arm, and died that we might live.

"How sleep the brave who sink to rest,
By all their country's wishes blest!
By fairy hands their knell is rung,
By forms unseen their dirge is sung;
Their honor comes a pilgrim gray,
To bless the earth that wraps their clay.

But it is with no ordinary degree of pleasure, and a heart filled with gratitude to Him who holds all things in the hollow of his hand, the writer announces that not one has fallen since our last meeting.

What cause for congratulation! What cause for praise and adoration! True it is, as in the past, the "Grim Monster" has been yearly flying his shafts into the ranks of our membership and many shining marks have been pierced, many whose names and noble deeds may never re-appear in print to be read and admired by coming generations have fallen, whose memories will be cherished in the hearts of a grateful people, but the "regular army" for the past twelve monthsh as escaped unscathed and are still standing as sentinels on the walls and watch-towers erected by the organization. Let us not, however, beguile ourselves into the feeling that the with-

holding of the "icy hand," for the year just past gives us assurances as to the future.

Old time, with his all-devouring scythe, will continue to work in the gloomy harvest, will continue to clip the brittle threads of life, and ere another twelve months roll around, our ranks may be broken and others may go to join that great silent majority, so, in our zeal for the professional honor, in our eagerness to struggle with the many scientific questions which are daily presented to us, let us not forget that divine edict, issued in the long ago, "Thou shall have no other god before me," but let us keep in mind these lines of the immortal Watts;

"My soul be on thy guard!
Ten thousand foes arise!
And hosts of sin are pressing hard
To draw thee from the skies.
O watch and fight and pray;
The battle ne'er give o'er;
Renew it boldly every day,
And help divine implore."

THE "JEROME COCHRAN LECTURE."

By J. T. Searcy, M. D., Tuscaloosa.
Superintendent of the Alabama Bryce Insane Hospital.

Mr. President and Gentlemen of the Medical Association of the State of Alabama:

WHAT IS INSANITY?

There are many kinds of mental defectiveness in society. They range from slight peculiarity and feeble-mindedness all the way to insanity and idiocy, with every conceivable grade intervening. Indeed, this fact is so generally recognized, that we all have an instinctive habit of estimating and classing the persons we meet in respect to their mental defects, as well as their excellencies, with even more concern and personal interest; and there is always a current, or an under-current, of social exchange of opinions in these matters. It is astonishing how widely the range of defectiveness is found to extend; it permeates society in all directions.

Knowledge of the universality of criticism and of the discredit a reputation of defectiveness brings, leads persons to repel promply suggestions of their mental weakness, eccentricities or faults, and leads them to assume and assert their equality withothers; and carried further, even to maintain the generally popular proposition, that "all men are equal;" or,

that to this rule, only the extreme cases of defectiveness are exceptions. The rule is, in polite society, mention must not be made of the defective sides of character; although, by necessity, the rule is often broken over in the under-current of exchange, I mention.

This general-equality rule, which policy and politeness maintain, and to a considerable extent the law, leads in the long run to many inconsistencies and wrong principles, which are embodied high in the philosophy of the day; it crops out even in our declaration of independence, and it pervades many professions, particularly those that relate to the regulation of conduct and character, and, as in psychiatry, to mental abilities and disabilities.

Under this rule and custom, the man holds "the right" of assuming as high a stand as others, or an equal stand with others, until the contrary is publicly proven. If not convicted of a crime in court, he has "the right and privilege" of claiming his innocence, or even of claiming a generally innocent character; if he is not shown to be "bad," he can claim to be "good."

The same practice is injuriously carried over to psychiatry, where, as a part of the business, it is necessary to know the facts of the case and often to assert them.

This polite, politic or legal custom of granting, that only the extreme cases are the defective ones, leads to the assumption and largely the admission that there are no other grades and kinds of defectiveness above or outside of the extreme ones. In the courts it is often demanded, on the basis of this principle, that a verdict or an opinion shall be given either in one or the other of two sets of terms; either the man is "sound" or "unsound" men-

tally—he is either "sane" or "insane"—categorically answered, without any mention of grades and degrees; on the same principle that he must be "either guilty or not guilty" he must be "either insane or sane." This practice leads, too, to the habit of describing insanity as a condition with limits and "border-lines;" or of confining it within the stages and symptoms of a specific "disease."

The fact is, in almost all, if not in all such cases investigated, there is "unsoundness," and the point to be determined is, whether it is extreme enough to be pronounced "insanity."

In my opinion it is wrong to speak of insanity always as a "disease." Defective physiology can come from other brain condtions than an impairment of structure or a disintegration of the cells going on at the time, which is implied by the term disease. It can come from simple deformity, without there being any active cellular disintegration, the structural defectiveness may be perfectly healthy. Bad physiology can come from simple weakness; or, it can come from shock, or from transmitted disturbance of the cells, without there being disease in progress. Nor need it be that the healthy deformity, irregularity or defectiveness of structure is the result of previous disease or injury, it may come from defective hereditary morphology in the natural growth of the parts. Physiology is always founded on morphology, they go together. Defective physiology always indicates defective morphology. Without what is known as disease, there can be defective morphology; it can come from an inherited defective morphologic habit; in which case, there is an inherited tendency in the parts to assume in

their morphologic growth an improper, irregular, faulty, or unusual arrangement, or construction of the cells.

I think the word "defectiveness" is a much better general term to use in reference to cerebral or mental unsoundness than disease.

We are dealing with a very unstable and variable living entity, when we are studying the brain and its functions; so that it is very proper to say, there are many *kinds* of mental defectiveness, and insanity is only an extreme *grade* of any one of them. The mentally defective person of any kind rises and falls in the scale of his defectiveness, without any reference to "border lines" anywhere; he is called insane when he passes a certain grade in his downward course; and, while different people in a community exhibit different kinds of mental unsoundness, only those of them are called insane, the grade of whose aberrations brings them within the limits of certain prescribed rules or state laws.

The question arises, where is the level or grade in the scale of our estimates, below which "unsoundness" or defectiveness becomes insanity? Or, where is the prescribed limit or "border line," set by public opinion or state law, within which the defective is called insane?

These are much discussed and very vexed questions, because opinions, legal and medical, differ with the times, the degree of civilization, the country, the mental qualifications of the judges, the juries, the doctors and the witnesses. Where a level, limit or grade shall be placed to a very variable condition, below which it shall be insanity, or how to describe this grade in all its multiform kinds, naturally gives rise to differences of opinions and descriptions.

The medical profession have always insisted upon there being grades and kinds in mental defectiveness, and of late years have grown more and more emphatic in their assertions to this effect, while the clerical and legal professions have, as a rule, been conservative and reluctant to admit them. The one is largely engaged in forming punitive public opinion, and the other in enforcing penalties of state law.

The trouble with psychatrists has been, they sometimes leave their side of the question, and, for convenience of the other side, are induced to attempt to set hard and fast lines of distinction to a very variable condition in the same person, or to include under one definition an almost innumerable number of different mental states in different persons, which is, of course impossible.

Within our hospitals there are no two patients alike, and yet all are "insane" according to law. The nearest approach they make to similarity is when they come nearest to having lost all mentality. In the hospitals, we have the exaggerated the extreme grades of defective ness; at large, on the out side, are many milder grades.

With these aspects of the question, if forced to give a definition of insanity, it is good to say, it is that grade of mental or cerebral defectiveness which brings the person within the jurisdiction of the law. The law or the court, of course and in fact, is the tribunal which determines the case and fixes the grade of the defectiveness, which is called insanity. It is not left to the medical profession. If the medical expert, in a certain case, differs from the court, his opinion does not hold, the court's prevails. As I say, he sometimes appears badly when, for the convenience

of the court, he attempts to give a definition which will hold within its limits all the kinds and grades of mental defectiveness, or to describe it in the particular case as a fixed condition. His most valuable testimony often lies in his being able to anticipate, by his experience and knowledge, a greater degree of defectiveness to follow, and to advise that the court interfere in time to arrest further progress of the malady, or to prevent harm being done to others when the man reaches a worse state.

After the patients are in the hands of the physicians in the hospital by the order of the court, his opinion then prevails; he then decides when they have returned to a sufficiently high degree of mental abilities to be allowed to go at large again. And just here, let me say, we are often inconsistent in recording our patients "restored" or "recovered," when, holding to our side of the question, we know their conditions are very unstable, and, in large majority, are liable to lapse again into their previous degrees of defectiveness. Most of our patients ought only to be sent to their homes "on trial," and marked "recovered" when they are able to remain away a certain time, say six months; even then relapses often occur.

The law takes cognizance of mental defectiveness in persons for a number of objects; and, inconsistencies are apparent because different kinds and grades of defectiveness are pronounced insanity according to the different purposes forwhich the investigations are made. Grades of defectiveness differ, for instance, for sending persons to the hospital, for absolving them from the penalties of the law, for invalidating their wills and contracts, for preventing their marrying, testifying or voting, etc.; and there are instances where the same grade of defectiveness is called, or not called insanity, according to the circumstances;

for instance, where a man is called insane, if he is involuntarily injured with alcohol or drugs, but not insane if he is voluntarily injured. The object for which the investigation is made enters often into the definition.

The matter of dangerousness largely enters into the question of insanity. It was the feature that first drew the state's attention to the insane; and without it I question whether anything like as much would ever have been expended upon them. Public safety combines with public sentiment to render the appropriations for the insane much larger than for any other class.

The popular idea of an insane person is, one who is mentally defective and who is a menace to himself, to property, or to the peace and welfare of others. And it is not improper to make this feature a mark or test in our descriptions or definitions of insanity, particularly when the object for which the investigation is made is to restrain the person in a hospital or some other way.

There are two elements of character in mental defectives, which prominently and practically draw the law's attention to the consideration of their cases, and the state to take charge of them; the one is delinquency, the other is dependency. When a man is mentally so defective that he is a menace to principles of decency and propriety, or to the well-being of others, he is a defective delinquent; when he is so defective he cannot care for himself he is a defective dependent. The state takes charge of defectives of both these classes.

Mental delinquency and dependency, of course, shade off into each other, often they are combined in the same person; still, at the extremes they are distinct, and public institutions for the care of these

two classes ought, as far as practicable, to be kept separate. The simple dependents ought not to be mixed with the insane.

Delinquency, actual or threatening, is the principal feature of insanity, and I think it would be well to limit the term insanity to those defectives in whom the delinquent feature is the most prominent one. This is usually understood. This would make the term insane apply to those persons who have reached such a grade of defectiveness that the state has to take charge of them, and in whom delinquency is more prominent than dependency. These ought properly be the only inmates of the insane hospitals; those who are dependents, like harmless dements, imbeciles and idiots, should be kept separate, in institutions prepared for them.

There is a growing sentiment leading to placing under state care mental dependants as well as delinquents. The delinquent insane, for public safety, were first provided for; but now there are being added more of the purely dependent classes. State care, as a rule, is so much better than home or county care, that state institutions for such work are filling rapidly, and the whole number cared for is largely increasing. This is one reason for the statement that the mentally defective classes are increasing in civilized countries at a greater rate than the population. There are more of them in sight. But, outside of this fact, our humane, beneficiary, sanitary, medical and scientific efforts to continue all classes alive, are having the general effect of continuing into the adult and reproducing age degenerating and defective individuals—they are the ones needing and receiving "the saving" most.

When a nation or a race reaches what may be called its adult age all such efforts reach their highest success; then, as the race turns in its senility, degeneracy, which is always going on, increases, and the advanced efforts to continue alive all human beings alike succeed in making to live longer and to propagate themselves more, those who usually do not reach adult life, and are most frequently eliminated—mental degenerates and defectives among them.

If we should represent society by a blackboard diagram, with its members arranged in different levels according to their grade of mental ability, our figure would promptly assume the outlines of a triangle. Galton places one man in a million at the apex, with the rest, of the different grades, sloping off in increasing numbers toward the base. If we prevent elimination, or retard, by our improved methods, elimination, which is going on continuously throughout all ranks, we enlarge the size of our whole triangle, but our success relates mostly to the more and more numerous lower levels—those who ordinarily eliminate fastest, among whom are mental defectives. This is the actual way in which defectives are increasing.

Mental defectives are found in greatest numbers in the "extremes" of society, among the degenerating rich and the already degenerated poor. The habits that lead to degeneracy prevail more among these than among the industrious, healthy, "middle classes." We find defectives, however, coming down to the insane grade from all directions. Their multiplication is due to broadly prevailing conditions and habits in the country, and would not be arrested, except in very small part, by our stopping the propagation of the extreme grades by unsexing them; they represent only a few in

the lowest grade, and are close to elimination already—are only kept alive by the beneficence and sufferance of society.

So that, when we put into practice our advanced, humane ideas, and our generally improved methods, of continuing alive all grades of humanity alike, we carry into adults or propagating age more and more of the degenerating; there is no need of surprise at the increasing numbers of the extremely defective—the insane. I fear the state is dragging a lengthening chain.

But to return to our subject: The delinquent feature should be made the most prominent one in declaring persons insane and in committing them to the insane hospitals. Our insane hospitals should not be loaded with dependents. As a remedy, the county alms houses should be forced to their work properly, so dependents would not be crowded into the insane hospitals or under state care.

There is another, matter relating to insanity, that has attracted a great deal of attention. If a person has committed a crime, a high crime particularly, the state generally assumes the attitude of resisting the plea of insanity, introduced for the purpose of relieving him from punishment and sets back its definition of insanity to a much more extreme degree of defectiveness than for any other purpose. For fear of abuse of the privilege, the law, in this particular, is in the opinion of the medical profession, often much too conservative; and, necessarily, we see legal definitions of what constitutes insanity, on this account, have differed greatly, and have been quite inconsistent between the more conservative and the more liberal courts. Much of the inconsistency grows out of the attempt, I have been mentioning, to

give an exact definition which shall apply alike to all cases, and to the necessity, which afterwards arises, of altering this definition, or rather, of taking different grades of defectiveness, to which the term shall be applied, according to the different cases and the different courts, as well as the different purposes for which investigations are made.

It has always been the case that a much lower or more extreme grade of defectiveness has been defined as insanity and has been required to be proved in order to absolve a person from punishment for crime than any other purpose—for high crime particularly. The law has been extremely reluctant to admit grades of defectiveness in these cases particularly, for fear thepr ivilege would be abused. It has seemed more anxious in these cases than any other kind, to have a hard and fast upper line or limit fixed for its definition of insanity, and concessions, granting that there are grades of *moral disability* have been very reluctantly admitted. The cause of the criminal insane is progressing however, even along this latter line.

At first, we may say, no person was absolved from the penalty of the law for high crime, on account of insanity or any grade of defectiveness. If the crime was committed, the axe fell.

Then, as advances in psychiatry were made, the concession was granted that the person would be declared irresponsible, if it were proved that he was so defective at the time of the crime he did "not know what he was doing;" meaning that he had no knowledge of his act—that there was no conscious intention in his act, and he had no memory of it afterwards; which is an extremely low test.

A step higher in the rulings was made, when the test was changed, so as to grant that the man may know that he is acting at the time, and have conscious intention in what he does, and remember it afterwards; but the grade of defectiveness, which would absolve him, was defined to be—he must not be able to appreciate the character of the act.

The wording of this test in time gradually assumed "the knowledge of right and wrong test." Knowledge of the "character of the act" involves in its higher phases, knowledge of its rightness or its wrongness. This test has held its ground a long time.

Strictly construed, "knowledge of right and wrong" is a very extreme test. The degree of mental defectiveness is very great, in which the person is not able to know or appreciate that the act he is doing is contrary to public opinion or the state law. But, while the wording of this test has been kept in the books, a great deal of latitude, in obedience to progress in psychiatry, has been allowed and taken in construing it, particularly of late years; and many inconsistencies in legal opinions can be found, according to the extreme conservatism or the liberality of the different courts and jurists. There are few patients in our hospitals who have no "knowledge of right and wrong," the management of such institutions largely depends upon it, just as that of society outside.

The "knowledge of right and wrong" test is a test of the intellectual ability of a person, of his being able to know or understand the law when told him, and relates solely to his degree of intelligence, not to his *moral disability* to observe it afterwards.

So that, *moral disability*, except when it is obliterated by intellectual disability preceding and ex celling it, has not been granted at all, until of late years. Even now, it is very much questioned and denied. If the man has mental ability to know the character of the act he is doing and that it is "wrong," that is, forbidden by public opinion or state law, and has mental ability to appreciate the certitude of the punishment to follow his doing it, only of late years, has it been granted that there are some cases in which he is separately defective or more defective in his moral ability, so that he is not able to hold from doing the wrong act, knowing it is wrong.

The medical profession has usually been the ones to assert that there are such cases, although they may be infrequent and extreme ones. We have such cases in our hospitals, and we think they exist in the courts and in the penitentiaries. We only insist that there are such cases. Whether they shall be, on this account, absolved from the penalties of the law, or not, is not our question, that belongs to the courts.

It is true, we may say there always exists some defectiveness of the intellectual abilities in these cases; they generally have a passible intelligence, but their weakness, or obliquity or lack of "moral sense" is greater than that of intellectual sense. The "recidivists" of our courts are largely of this class. They are constantly being brought into court, notwithstanding they are frequently punished; yet their intellectual disabilities would not send them to an insane hospital.

"The indeterminate sentence" is a partial admission of the principle. Iregard it a great advance in penal law.

It grants that there are persons, convicted of crime, who have intellectual and moral abilities such as would render them good citizens, and that they ought not to be committed for a fixed period, but should be allowed, after time and trial, to go at large again; and, on the other hand, that there are others, even convicted of minor offenses, whose inherent moral disabilities are of such a low order, they ought never to be allowed to go at large again. Persuasion and punishments do not deter such persons, although they are intellectually capable of appreciating and recollecting them; nor can they be trained higher.

Moral or ethical abilities are the latest, as well as the highest, attained in the evolution of the excellent man, and are the most delicate to be held on to and hardest to be maintained. In a gradual loss of mentality, they are generally seen to go off first. Many a man, high in church or state, has first shown his beginning mental defectiveness by a weakening or an obliquity in his "moral or ethical sense." He was less polite, or decent or pleasant than he had been, and his obliquity increased as his brain malady progressed; in some cases he has done some grossly immoral act, long before his progressing cerebral defectiveness was apparent in his failing intelligence.

Both in law and medicine, we often see the statement that *delusions* are a sign of insanity. If aman has an opinion, idea or notion, which is obviously incorrect to the intelligent persons around him, and if he hold to it notwithstanding efforts are made to correct him in it, it may be said to be a sure sign of mental defectiveness. Still, his "delusion" is only one symptom by which to judge the grade of his defectiveness, and it may

not be sufficiently grave to determine his insanity, sometimes it is not. Persons have delusions, some of them silly and absurd, who would not be called insane. When his delusion is of a charccter which renders the person dangerous or troublesome, it determines the grade of his defectiveness to be insanity at once. A delusion is always, however, a sign of defectiveness, whether of an insane grade or not. Men, who were otherwise of excellent mental ability, have shown delusions; but, because their delusions did not render them objectionable members of society, they were never called insane.

ANTIPYRETICS; THEIR USES AND LIMITATIONS.

By Tucker Henderson Frazer, M. D., Mobile, Ala.
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Heat is a mode of motion, and is produced in the ani-economy by vibration of its molecules. This molecular motion favors oxidation of the tissues, and the greater the motion greater is the heat produced.

The normal temperature of the body is 98 3-5 degrees F., and it is kept at this point in health by equal production and radiation of heat, the sources of production being the secreting organs, the muscles and the general tissues, while the heat is carried off by skin (sweat glands and radiation,) the bowels and kidneys. This production of heat and the regulation of body temperature and its maintenance at or near a normal standard, are two of the most important phenomena presented by the living organism.

When heat production is greater than heat radiation, pyrexia or fever is the result. Any agent that destroys the equilibrium of temperature is said to be fever producing. The generation and elimination of heat in the body are presided over by the nervous system, particularly the sympathetic nervous system, and they depend upon the vascular condition of the heat-eliminating organs. If there is an increased blood supply in the secreting and excreting organs of the body, as the skin, kidneys and mucous surfaces, then the temperature is lowered, because more heat is carried off; but if an in-

creased blood supply takes place in non-secreting and non-excreting tissues, as the viscera and deeper structures, then there will be increased oxidation, hence increased temperature.

When the sympathetic nervous system is irritated or depressed by extraneous poisons, as the germs of the essential fevers, then there is a disturbance of the capillaries and arterioles. The vaso-motor nerves of the surface tissues become stimulated, while the vaso-dilators of the deeper structures are excited, causing surface anæmia and hyperæmia of the deeper tissues, leading to an increased heat-generating area and diminution of the heat-giving-off area; in other words, to retention of an excessive amount of heat in the body termed fever.

Recent bacteriologic investigations have established the fact that the essential fevers are due primarily to the presence of micro-organisms. Therapeutics have been keenly alive to the importance of this undeniable truth, and have been quick to adopt methods and measures of an antiseptic nature.

Any drug or agent that will stimulate secretions and excretions, and increase heat elimination would be termed an antipyretic, or any agent that will retard heat production either by rectifying the nervous system in its control over the circulatory condition of the tissues would also be termed an antipyretic.

Agents and drugs that cause these conditions in the extreme will produce harm by causing heart depression and exhaustion of the nerve centers.

Some therapeutists claim that when the phenomena of fever are presented, it is but the evidence of an effort of nature to throw off and destroy poison in the circulation; that the increased heat of fever is necessary to destroy the germs that produce fever; that nature can more effectually eliminate the poisons when let alone than

when an attempt is made to assist by means of antipyretics. However true this may be, the majority of physicians will continue to use this ever-enlarging class of drugs.

It is well known to pathologists that prolonged high temperature causes parenchymatous degeneration of such viscera as the liver and spleen, and all of the muscles, especially the heart-muscle, this fatty degeneration or cloudy swelling being a speedy sequel to prolonged high temperature.

It is now taught and believed that all fevers are due to a specific germ in the blood and tissues of the body. Each kind of germ producing effects peculiar to itself' but all of them having the same effect in profoundly disturbing the sympathetic nervous system, thereby destroying the equilibrium of the normal temperature.

Successful attempts have been made to demonstrate the microbic origin of typhoid fever and malarial fevers, and it is well known that the streptococci produce septic fever. The question as to the germs of the eruptive fevers, of influenzal, pulmonic and cerebro-spinal fevers, is still sub judice, but the time is not far distant when each of these germs will be satisfactorily demonstrated. Knowing then that germs and their toxins produce fever, it is but natural to think of an agent that will destroy these germs and neutralize their poisons, hence the antiseptics would be first suggested as satisfying all the requirements in the treatment of fevers. But unfortunately these agents (antiseptic) cannot be put into the circulation in such a form as to destroy germs and neutralize their toxins without injury to the blood and tissues. The antiseptics, however, are our best antipyretics; they act principally by inhibiting germ growth and increasing elimination of poisons.

The ideal antipyretic is one that will decrease high

temperature by its influence upon heat-production, without depressing the heart. Medical science has given no greater boon to suffering humanity than the well-nigh perfected list of measures and remedies that are now used in the treatment of fevers. A strict interpretation of the title of this paper might exclude other than the medicinal measures on the list, but accepting the true meaning of the word, antipyretic, we must include all agents or measures which reduce the body temperature when abnormally high. The striking utility of cold and the marvellous results obtained from the use of coal tar derivatives, comprise the every-day experience of the physician. Instead of the lancet and veratrum viride of half a century ago, we have the cold bath and acetanilide and its congeners; instead of thirst and starvation in fever, we have an abundance of water and a well-regulated regimen. When antipyrine and acetanilide were discovered, medical science witnessed the dawn of a new era.

Antipyretics may be classed as

1. Those that control the circulation, thereby diminishing tissue oxidation, as aconite, veratrum, gelsemium, digitalis and chloral.

2. Those that control the circulation and augment the secretions and excretions, especially of the sweat glands, as quinine, antipyrine, acetanilide, phenacetine and other coal tar products.

3. Antiseptics, or those that prevent multiplication of germs and neutralize their products, as carbolic acid, the salicylates, salol, salophen, guaiacol and mercury.

4. Cold and volatile agents, as ice, water, alcohol, ammonia, ether, etc.

I submit this classification for the sake of argument, and I shall not go into any detailed description of the therapeutic action of all the drugs embraced under each head.

Agents that lessen heart action lower temperature by preventing oxidation of the tissues; such is the effect of aconite, veratrum, gelsemium and chloral. These agents were formerly used altogether by older practitioners, before the more modern coal tar products came into use, and were considered very effectual. Even now some of our best clinicians prefer tincture of aconite in one or two drop doses every hour, to the coal tar products.

Drugs that control the circulation and exercise a favorable influence over the secretions and excretions, naturally stand out in bold relief, and a careful study of their uses and abuses will repay the investigator. A brief notice of the principal agents thus used can only be made in a discussion of this kind. Asked to name the king of this class, I should reply, Quinine. The doctor of thirty years ago knew that quinine, if given early, would prevent a chill or paroxysm, but he little knew of the potential character of the drug in its relation as antiseptic to the causative agent of the chill. Prior to the period when Binz expounded his theory of the germ nature of malarial fever, quinine was employed empirically, but when Laveran demonstrated the plasmodium malariæ, the drug became a mighty weapon of offense and defense against a dangerous and oft-times insidious foe. It is universally acknowledged to be the best remedy for malarial fever, both as a prophylactic and cure. "It is an antipyretic by virtue of its action on cells—as well on the morbific cells of malarial fever as on the normal cells of the organism." In billious remittent fever it should be given in large doses before sporulation of the germs takes place, thereby anticipating a paroxysm. It should be given in large doses in pernicious malarial fever, as much as sixty grains being required at one dose. In the last days of an attack of typhoid fever, when the temperature is normal in the morning and 100

to 101 degrees in the afternoon, ten grain doses of quinine given when the temperature has reached the normal, seem to strangulate the last vestige of the fever and usher in a speedy convalescence.

Qninine finds a wide application in all septic conditions, either localized or general. I cannot speak of the limitations of this valuable agent, because I believe limitations are induced only by individual idiosyncrasies.

Antipyrine acts by (1) diminishing oxidation, and (2) by promoting heat loss. The latter is attained by dilating the cutaneous vessels, allowing free radiation from surface and by refrigerant action of evaporation of sweat. Again it may influence the nerve centers which regulate the development or radiation of heat. Noted observers (Sodowsky and Podonowsky) have proved that the antipyretic action of antipyrine is due exclusively to its influence upon the brain centers which regulate the temperature. In the sthenic type of fevers, antipyrine finds its greatest usefulness, especially in affections of childhood. In the high temperature of pneumonia and in scarlet fever, antipyrine is extremely useful. In the latter affection, however, its usefulness is somewhat curtailed by the frequent kidney complications that intervene. In asthenic fevers, drugs represented by antipyrine are not harmless, and often have to be discontinued or avoided. They should not be used in fevers of a chronic type, as represented by phthisis, nor should they be used for any length of time in malarial fever, though some authorities claim that they possess great antiperiodic virtues.

Acetanilide acts by decreasing heat production and increasing heat dissipation. Compared with antipyrine, its effects last longer. It should be used in the asthenic type of fever, the profuse sweating and depression nearly always accompanying its use in such cases. It is very

useful in the pyrexia of rheumatism and rarely fails to control the fever. I wish to direct especial attention to the use of acetanilide compound in beginning treatment of malarial fever. Called to see a patient who gives a history of chill, and when seen has a temperature of 104 to 105 degrees F., my stereotyped formula is as follows:

℞ Hydrarg. chlor. mite.....gr. iii.
Podophylin.....gr. 1-4
Ext. colocynth co.....gr. ii.
Acetanilide co.....gr. xvi.
Mix div. in capsules iv.
Sig. Two capsules at intervals of two hours.

This is to be followed, when the temperature has subsided, by the antipyretic doses of quinine alluded to heretofore.

Phenacetine, perhaps, occupies a more stable place in the confidence of the profession than any other of the coal tar products. It is used in nearly every affection where an antipyretic is demanded, and it rarely disappoints. It is especially useful in pneumonia and pleurisy. Care should be observed in asthenic fevers, especially in typhoid fever of the third or fourth week.

Kryofine (Methoxacet-p-phenetidin) is one of the new synthetical compounds, and within the last twelve months has attracted the attention of the profession in a marked degree. In fact, it bids fair to outclass its fellows, antipyrine, acetanilide and phenacetine. It is a safe antipyretic in acute articular rheumatism, and in meningitis it reduces fever by its peculiar action upon the heat centers. It has given great satisfaction in pneumonia and scarlet fever, and in kindred pyrexias where the physician "feels the necessity of controlling the temperature." Kryofine is easy of administration and is a prompt, safe antipyretic, usually free from un-

pleasant collateral effects. It is worthy of the careful attention of the up-to-date doctor.

Salicylic acid and salicylates are antipyretics when given in decided doses, but are trying on the stomach.

Salol is also antipyretic in that it acts as a depressant to the heart and is an antiseptic, being composed of salicylic acid and carbolic acid.

Salophen is an ideal internal antiseptic, and has the same effect as salol, but it is more palatable and less irritating to the stomach and must be given in large doses in order to get immediate antipyretic effects. Close vigilance must be exercised when salol and salophen are given, as some patients exhibit marked idiosyncrasy to them, presenting carbolic acid poisoning as shown by the passage of dark brown urine.

Guaiacol is a very powerful antipyretic when applied locally, alone or with glycerine or oil in fifteen to thirty drop doses, producing profuse diaphoresis and rapid lowering of temperature. The carbonate of guaiacol is a better form to administer internally; it is less trying on the stomach and certainly more palatable, being a tasteless powder. It is not necessary to say that its greatest field of usefulness is in pulmonary and abdominal tuberculosis.

The disinfectant and germicidal power of the mercurials are equaled only by their antiphlogistic and anti-inflammatory action. The uses of the mild chloride in malarial affections are too well known to be spoken of. In meningitis, endocarditis and pericarditis, mercury is of great value, and its prophylactic powers in the early stages of diphtheria and membranous croup have often been demonstrated. In tonsilitis and inflammation of the submaxillary and sublingual glands, absolute dependence can be placed in the efficacy of small but oft-repeated doses of mercury.

The utility of minute doses of calomel in diarrhœa and dysentery of infants accompanied by vomiting and great heat of the head, restlessness and fever, is the every day experience of my auditors. The experience of India medical officers has shown that mercury is harmful in acute hepatitis.

It has been claimed by German observors that calomel in ten grain doses is the specific treatment in typhoid fever; these large doses are said to have an antipyretic effect. Mercury is extremely useful in syphilitic inflammation of serous membranes, and it is in this class of pyrexias that the most brilliant results are obtained. This is notably so in iritis of specific nature.

The fourth and last class of antipyretic remedies can be represented by cold. The profession is rapidly learning the method of properly employing cold in fevers. Its use in typhoid fever has become synonymous with the name of its chief advocate. In ordinary pyrexias sponging with cold water or with water and alcohol produces marvelous results in relieving restlessness and producing sleep. "Temperature may rise to the point where it is of itself dangerous to life, or the cause of a protracted convalescence due to tissue changes produced." "Undoubtedly the best and safest means of subjugating this hyperpyrexia is by the means of water."

As an anti-thermal agent, the cold bath stands out prominently in the recorded experiences of therapeutists. It is perhaps the surest and safest agent at our disposal, and is gradually supplanting many other antipyretic measures. Noted improvement in the sunctioning of the skin and a betterment of its condition locally and generally are among primary effects, and secondarily, what is very important in reference to the control of fever, there is an improvement in the disturbed temperature regulating power of the skin.

The use of cold finds its greatest application in malarial, typhoid and scarlet fevers. It is not necessary to suggest the best form in which to apply cold. At one time sponging with cold water suffices, at another the bath properly regulated is better.

In a case of malarial fever under the treatment of another physician, the speaker witnessed the application of ice over the solar plexus, the result being all that could be desired.

In the treatment of fevers, the happy mean should be followed—not letting the temperature remain high any great length of time, waiting for nature to be victorious —nor should we be too energetic in giving antipyretic drugs, thus "avoiding the scylla of excess and the charybdis of debility."

In concluding this sketch of antipyretics, I cannot refrain from using the language of Dr. Flint, who says: "The great objects in the treatment of fever itself are to limit and reduce the pyrexia by direct and indirect means; to limit and repair destruction and degeneration of tissues and organs by alimentation; to provide matters for consumption in the abnormal production of heat and thus to place the system in the most favorable condition for recuperation after the disease shall have run its course."

REPORT OF THE EPIDEMIC OF SMALLPOX IN JEFFERSON COUNTY IN 1897 AND 1898.

By William Hinton Wilder, M. D., Birmingham, Ala.

Member of the Medical Association of the State of Alabama.

Mr. President and Gentlemen of the
Medical Association of the State of Alabama:

It was with some hesitation that I accepted the invitation of our worthy President to report briefly the epidemic of smallpox in Jefferson county during the summer of 1897, and the autumn and winter following.

Be it understood in the beginning that this is not an essay on smallpox, but a brief history of the epidemic in question. Up until May, 1897, there had not been a case of smallpox reported in Jefferson county in fifteen years, and our community was thrown into a state of excitement during the first week of that month by the announcement in the public press that the case of Mrs. Connelly on Eighth avenue, between Twentieth and Twenty-first streets, of Birmingham, had been pronounced smallpox.

This case was being treated by Dr. T. L. Robertson, and the diagnosis was promptly announced by him after consultation with Drs. Sholl and Parke. This was a clear case of variola, and no one doubted the diagnosis at all. That this woman came in contact with the contagion of the disease in Memphis, Tenn., there is no room for doubt, for just prior to her sickness she was on a visit to that city, where there were cases of smallpox;

and the negro woman who washed her clothes while in Memphis was sent to the pest-house in that city about the time she left there.

After Mrs. Connelly's case had been diagnosed as smallpox, the care of the patient was entrusted to her father, a retired physician, who remained with her all the while. The house was placarded "Smallpox," and guards were placed at the front gate of the house day and night; the back entrance to this house does not seem to have been guarded at all.

When she got well, the disinfection of the patient, house and contents was left to the care of the family only; this was probably a serious mistake, for the next case that demanded attention occurred in the negro settlement four or five blocks in the rear of the Connelly residence. These cases were treated by a colored physician and pronounced chickenpox. That this diagnosis was wrong, there can be no doubt; for the first white male in our city who contracted smallpox was a carpenter, who repaired these negro shanties after the so-called "chickenpox" cases moved away.

The next case that presented itself was a negro by the name of Stewart, who lived on the Southside (in Birmingham) in Alley G, between Twenty-first and Twenty-second streets. This patient was also being treated for "chickenpox" by the colored physician, previously referred to. This case was reported to the committee of public health, and in the absence of the county health officer, I was requested to go and see it. The patient had a thick pustular eruption all over his body, but was feeling quite comfortable, with very little fever. He gave the history of having been nowhere except to his work in the mines and to his home. I returned immediately to the chairman of the committee of public health and stated to him that I had never seen a case of

variola before, but that I thought I had one now, and requested him to go with me to see it. We went at once, and he very promptly pronounced it a case of varicella. This was the 28th of May, 1897. The following day the chairman and another member of the committee of public health again visited this negro and decided that there was enough suspicion of smallpox about the case to have him and another similar case removed to an improvised pest-house, and placed in charge of the same colored physician who had treated numbers of these cases, and had all along contended that they were only chickenpox. This physician paid but little attention to these two patients, and in a short time allowed them to leave their temporary quarters without disinfecting themselves or their bedding, which they took back to town with them.

One of these discharged patients took up his residence in a thickly settled negro quarter on Fifth avenue and Fourteenth street, and soon afterwards this so-called "chickenpox" made its appearance in that neighborhood. This disease ran on for several weeks, when on July 16, 1897, Dr. A. T. Henley was called to see a negro family with this disease living on Fifth avenue, between Thirteenth and Fourteenth streets. He found four or five cases with vesicular eruption, not very thick, and far from the typical eruption of variola. These patients did not seem to be much sick, and were washing and ironing clothes for white families. He had seen one of these women five days previously to this visit with a temperature of 104, but at this second visit she had almost no fever. The doctor was unwilling to allow these cases to continue to be called "chickenpox," so he reported the matter to the county health officer, and to the chairman of the committee of public health, with a request that the State health officer, Dr. Sanders, be

sent for. After some discussion, it was decided to wire Dr. Sanders, who came at noon next day, July 17, 1897. He was first shown the white carpenter referred to above, who was being treated by Dr. Sholl; this case was in the vesicular stage, and was considered by Dr. Sanders to be "extremely suspicious, but not fairly up to the standard of smallpox." We next showed him Dr. Henley's case, which was not so well marked, but was also considered suspicious. The next case examined was a mulatto negro carpenter, a patient of Dr. T. L. Robertson's, and this case was pronounced "unmistakably smallpox." The next day the white carpenter was again seen by Dr. Sanders, Dr. Barclay and the writer, and pronounced variola.

The committee of public health was quickly called together on that day (Sunday, July 18th, 1897) and smallpox was decided to be epidemic in Birmingham. From that day the doubt as to the character of the prevailing disease in our midst was settled, and the settlement unreservedly accepted by the entire profession, except the colored members, who, with one of our daily papers and a few of our laymen, pretended to doubt the correctness of the diagnosis, and asked that a government expert on smallpox be sent for to pass upon the character of the epidemic.

In the meantime I had established, on July 20, a temporay smallpox camp in the woods about two miles from the city, where I was receiving patients at a rapid rate, while the county health officer and his assistants were busy with a vaccinating and disinfecting corps.

About this time Dr. Glenn Andrews and the lamented Dr. Seelye, of Montgomery, visited our city to inspect these cases. After going through our camp they, too, expressed some doubt as to the correctness of our diagnosis. This, I fear, was due to the fact there had been

cases of the same disease in Montgomery and which, up to that time, seem not to have been diagnosed variola.

It was soon found that the number of our cases was rapidly increasing, and in addition to the quarantine hospital, then in course of construction, it would be necessary to establish a camp of detention, where all snspects or parties who had been exposed to the disease might be detained. The duration of their detention was at first placed at ten days, but this was soon found to be not long enough, and the time was lengthened to sixteen days.

On August 13, 1897, more than three weeks after our committee of public health had declared smallpox to be epidemic in Jefferson county, and after the county health officer had sent several weekly reports to the Surgeon General of the Marine Hospital service, Past Assistant Surgeon Carrington came, unsolicited, to our city to see what steps we were taking to stamp out smallpox. He specifically stated that he came not to diagnose the prevailing disease in our midst, for he and the surgeon gen- were both satisfied with the diagnosis, and wanted to learn exactly what we were doing towards getting rid of the disease.

I state this, Mr. President, because it has been published in a medical journal, that the Birmingham physicians were unable to diagnose variola and had to call for assistance from the marine service for that purpose.

There were many obstacles to an early diagnosis of this epidemic. It was as first wholly confined to negroes, and being of such a mild type, most of them did not send for a physician; those that did call for medical attention usually called in one of the colored physicians, and he would pronounce it "chickenpox;" tell the patient that it amounted to nothing, and would not report it to the health officer at all. Whenever a white physi-

cian saw one of these cases, the patient would usually appear not much sick, with little or no constitutional disturbance, and a mild eruption which was generally not very thick, and in the absence of a pronounced epidemic, and on first sight of the patient, none of us felt justified in asserting that we had an epidemic of smallpox.

Finally, Dr. T. L. Robertson was called to one of these patients whom he treated, and observed carefully from the beginning. This case proved a key to the situation. With a complete history from its incipiency, together with a more characteristic eruption than appeared in most of these cases, Drs. Sanders and Robertson soon agreed that it was unmistakably smallpox. This was the first case among the negroes diagnosed as variola, and therefore settled the question as to the character of the epidemic. As I stated above, this was on July 17, 1897.

As a rule, these cases were ushered in by a languid feeling, with little or no nausea or vomiting, slight headache and pains in the back and extremities; the pulse and temperature were only slightly elevated, and generally the patient continued about his usual duties. In the more severe cases, however, there would be a distinct rigor, rarely a chill, followed by a temperature of 103 to 104, with severe pains in the head, back and limbs. The pulse rate was usually slightly elevated in the milder cases, but in more severe ones, it usually ran up to 120 or 130.

The eruption generally appeared about the third day, but in some cases was delayed until the fourth; its first appearance was on the forehead, along the edges of the hair, and in the nose and cheeks; it next appeared on the palmar surfaces of the forearms and in from twenty-four to thirty-six hours was spread over the entire body,

including the palms of the hands, soles of the feet and the mucous membrane of the buccal cavity. The first appearance of this eruption was a slight elevation, something like a flea-bite, which passed rapidly into a larger papule. Upon the appearance of the eruption the temperature fell, the pains in the limbs and head disappeared, and the patient became quite comfortable. The shotty feeling of the eruption was not very distinct. On the third or fourth day of the eruption the papules changed to vesicles, with a slight depression in the center, making the umbillication quite distinct. Within thirty-six or forty-eight hours more this umbilication disappeared, and the vesicles changed rapidly to pustules. In the severer forms the face and eyes would swell considerably at this time, so the patient could not be recognized, and there would then be emitted a peculiar sickish odor, which may be considered pathognomonic; the voice also became husky. But in the milder forms there was little or no swelling in the face, and no change in the voice at all. The secondary fever now made its appearance, and was more or less elevated according to the severity of the case, ranging from 100 to 102. This fever only lasted a day or two, when the pustules began to dry up, giving the umbilicated appearance again.

About the twelfth or thirteenth day scales began to form in the same order in which the eruption appeared. Within two or three days more disquamation would begin, and usually lasted from four to eight days. This process could almost always be shortened by frequently washing and greasing the skin. The scabs in the palms of the hands and soles of the feet were the last to disappear.

About 8 per cent. of our cases proved to be confluent; these were more severe, and generally left pits. The

milder cases of the discrete form usually left a dark pigmented spot, which, in most cases, has disappeared.

Only about two per cent. of the cases were true varioloid. Those patients rarely complained of severe pains in the head, back and limbs as did the cases of variola; however, in a few instances the prodromal symptome were quite as marked as in the true cases of smallpox.

My assistant, a second course medical student, after having been thoroughly vaccinated, was taken ill with a temperature of 104 1-2 and a pulse of 120; on the third day there appeared on his face three points of eruption, which were soon followed by about a dozen on other parts of the body; his temperature immediately fell to normal, and he was able to resume his duties.

The eruption in all these cases of varioloid ran a rapid course, and in many cases pustules were aborted. There was no secondary fever to any of them, and in from eight to ten days there was no trace of the disease left. Our cases were comparatively free from serious complications; a few were troubled with a mild form of laryngitis; pneumonia was rare until the extreme cold winter months came on; even then there were very few cases, most of which appeared in the pustular stage. At this time a mild diarrhœa frequently made its appearance; constipation was more frequently present, and usually persisted throughout the disease.

My note-books show that the most frequent and troublesome complications were boils during the stage of convalescence. They appeared on all parts of the body, except on the palms of the hands and soles of the feet. A favorite site seemed to be the scalp; crop after crop appeared in the more serious cases, frequently prolonging the stage of convalescence for weeks.

There were four cases of advanced pregnancy among our cases; one a white woman, passed through the criti-

cal stage of the disease, giving birth to a seven-months child three weeks after recovery. The child lived only a few hours. The other three were negroes, one of whom gave birth to a healthy child, in the quarantine hospital about three weeks after having had a mild case of variola. The other two bore children about one month after leaving the hospital. None of these children were marked, and the one born in the hospital remained there four weeks, and did not contract the disease at all. The mother made an uneventful recovery.

Successful vaccination proved for us all that is claimed for it by its most ardent advocates; for after two months vaccination, isolation and disinfection, there were so few cases of the disease being found that the city authorities of Birmingham decided to discharge the smallpox crew, as they believed the epidemic was at an end.

If the inhabitants in the other parts of the county had been as well vaccinated as were those of Birmingham, this would have been true; but, unfortunately, this was not the case.

My report to the county health officer shows that up to October, 1, 1897, there had been admitted to the quarantine hospital 201 cases, only three of whom were white. Three of this number died, making a loss of one and one-half per cent.

During the month of October there was admitted to the hospital only eight cases, not one of whom was from Birmingham. The disease now seemed to take a new impetus, for we find that between the first of November and the 9th of January, when the Marine Hospital Service took charge of the epidemic, there were admitted to the hospital 215 patients, nearly all of whom were from mining camps in various parts of the county. Of these 215 patients there were eight whites and 207 colored. Of these white patients, a baby, died; also five

of the colored ones, making a death rate of 2.8 per cent.

The health record shows that up to this time there had also been treated, in a small pest-house in Bessemer, seventy-one cases, and that thirty-one cases had been treated at their homes. This makes a total of 526 cases treated up to this time, with a total loss of twelve, making a death rate of 2.8 per cent.

The financial condition of our city and county was by this time in such a state that the city and county authorities felt the burden of such an epidemic was becoming unbearable. Having now spent more than thirty thousand dollars, and yet the end of the epidemic was not in sight, a call was made through the Governor on the United States Marine Hospital Service. The Service responded promptly, took charge of affairs, and pursued the same course we had pursued, but with a more lavish expenditure of money, and consequently the work was done thoroughly. In two months time, by thorough isolation, vaccination and disinfection, they were able to put a practical end to the epidemic.

The Service had, in the meantime, discovered and treated 219 cases with five deaths (all colored), making a death rate of 2.3 per cent. The total number of cases treated up to this time were 709 colored and 36 whites, with a total death loss of two whites and fifteen colored, making a total death rate for the entire epidemic of 2.3 per cent.

There was but little of interest in the treatment of these cases. As soon as discovered, they were removed to the quarantine hospital, a temporary structure, for isolation and treatment of small-pox patients only.

During the summer, most of the patients were treated in tents, and we found that the greater airspace allowed each patient the better they did.

Treatment was almost wholly symptomatic; opium

was used to relieve pain in the head, back and limbs; quinine, acetanelid and greasing for high temperature, and calomel and epsom salts for constipation. Cold sponging and greasing with vaseline seemed to give more relief than anything else. The patients all seemed to enjoy it, especially in the pustular stage, and it undoubtedly hastened desquamation. When necessary, the eyes were protected by frequent washing with boric acid solutions. I found that nothing I could do seemed to have any effect on the pitting.

The diet for those that were very sick consisted of milk and soups, while the others subsisted on ordinary house diet.

A canvas cot, with coarse sheets and blankets, were furnished each patient; these were kept as clean as possible by frequently boiling and washing.

Patients were not allowed to leave the hospital until all scabs had fallen off and the scars had become smooth and slick; they were then given a thorough scrubbing with soap and water, after which they stepped immediately into a bath of 1-3000 solution of corrosive sublimate. Especial attention was given to the head. Freshly washed and boiled clothing was then put on, and the patient was compelled to leave the hospital enclosure immediately, and carried nothing except such articles as had just been thoroughly boiled at least two hours. Those that left the camp of detention were treated in the same way, and we did not discover a single case traceable to the hospital or camp of detention.

The average length of time patients remained in the hospital was twenty-six days. Immediately after moving patients to the hospital, the inner walls of the houses were washed with a 1-1000 solution of bichloride of mercury by means of a force-pump, using about two barrels of the solution to a room.

All mattresses, pillows and bed quilts were burned. All articles capable of carrying infection, including clothing, were soaked in the same solution. Such articles as could not be dipped were put in closed trunks and sprinkled with strong solutions of formaldehyde. As nearly all the infected houses were poorly constructed negro cabins, with large cracks in them, gaseous disinfection proved useless, and was soon abandoned, and in only a few of the better constructed houses were sulphur and formaldehyde employed.

In closing this report, I would like to be able to tell you that the last vestige of smallpox has disappeared from Jefferson county, but unfortunately I cannot. Since the withdrawal of the Marine Service, on March 10, 1898, the efforts to completely eradicate the disease have not been very creditable. Wherever a case was found it has been taken to the hospital and intrusted to the care of the convalescent and other inexperienced persons, and little or no attention paid to disinfecting the houses from which they were removed. The result of this negligence has been, that from the 10th of March, 1898, to January 1, 1899, there have been reported to the county health officer thirty-seven cases. Many of them came, however, from other counties. From January 1, 1899 to April 15, 1899, there have been reported fifty-four cases, and I fear that unless more vigorous and systematic efforts are made in the near future, we will have another epidemic.

"HEMORRHAGIC MALARIAL FEVER."

By William M. Ryals, M. D., Cowart's.

Member of the Medical Association of the State of Alabama.

As we have only a few minutes to read a voluntary paper, I can only give a brief, and incomplete description of this disease; but will mention two other fevers frequently pronounced, by the laity and some times, by physicians as cases of this disease. We find in this disease all the essential anatomical lesions usually found in other malarial fevers, with the addition of a great abundance of disorganized red blood corpuscles in the circulation. This hemorrhagic complication occurs in types of malarial fever, obeying the laws of periodicity, either from chronic malarial poison, or from acute malaria in persons who have been blessed previously with robust health. I have met with this disease occurring most often as a complication, of the pernicious or congestive type, of the æstivo-autumnial or remittent form of fever, the hemorrhagic coming on after a congestive form of a chill, from the third to the eighth day of the attack of fever. I remember to have met with more cases, occuring one year in the intermittent type of fever, and I am inclined to think, that even in the same locality, we may expect to find it occurring more often, in either the intermittent or remittent types, during different seasons. When the hemorrhage occurs as a complication of the intermittent form, the patient has generally been suffering from three to four

days, or perhaps for months previously, with seemingly mild attacks of chills, and after a more pronounced chill, the hemorrhage comes on and the fever generally remits afterwards. But after the hemorrhage from the kidneys in either, the intermittent or remittent type, if the patient is suffering from acute malaria of a congestive character, we may expect at some period, obeying the laws of periodicity, of the case, the occurrence of a congestive chill, which will make every condition, of the case worse, and will likely take the life of the patient, or recur again at the next regular time. In the remittent types of a congestive form of this fever, the patient's temperature prior to the hemorrhage may not range higher than a 103-4 in the evening, or at the time of day it should be at its highest, but it generally shows a tendency to go up suddenly a degree or two at this time, and the patient's extremities show a tendency to get cold at this time of the sudden increase of temperature, as shown by the thermometer from the mouth. The patient is more nervous, his countenance more anxious, the skin has a more dingy hue, generally, than you would expect from the ordinary remittent.

Finally, from the third to the eighth day of fever, the patient has a severe chill, the extremities get very cold, the thermometer will show from the mouth a sudden rise of temperature from 103-4 to 106-7½, after which the patient passes bloody urine, and the skin rapidly turns yellow, sometimes to almost a golden color, but in these cases of acute congestive fever the skin still retains a dingy hue. The yellow condition of the skin is not necessarily a true icterus, but an icteroid condition, resulting from the coloring matter of the diseased, and disorganized red blood corpuscles, but I am satisfied that this disease is sometimes complicated with icterus as the test of the urine, will often show an abundance of

bile as well as blood. This black water is not a true hematuria, but an effort of nature to eliminate from the blood the disorganized red blood corpuscles. When this fever occurs as the result of chronic malaria, malarial cachexia, or perhaps from persons who have been suffering for a long time, perhaps for months from a moderate amount of malarial poison, generally of an intermittent type, which may or may not have been incompletely checked by anti-malarial remedies, the patient is attacked suddenly with a severe chill and the thermometer by the mouth will soon show a temperature as high as 104-5, and sometimes higher, and after the chill the patient is soon horrified at the passage of a large amount of bloody urine. The skin rapidly turns yellow, resembling a case of true jaundice, not often taking on the dark, dingy appearance of the congestive, or more malignant type of this fever. But the patient having lived all the time exposed to malaria, the fever even in this type of the disease may take on the congestive character, but if so, the yellow skin will most likely show a dark, dingy appearance, and in this event, the patient, of course, is likely to be lost at some period from a congestive form of a chill. But in this type of the disease the fever will most likely remit not to rise any more, higher than 101 or 103. In hemorrhagic malarial fever the patient suffers more or less with gastro-duodenal irritation, which is sometimes a dangerous complication. They sometimes have black vomit. It is sometimes complicated, especially in the negro race, by nephritis, but I think this a rare occurrence. We sometimes meet with cases of malaria fever with a hemorrhagic diathesis, resulting from chronic malarial poisoning, from which the patient is liable to suffer a true hemorrhage from any mucous membrane of the body, most likely to occur from the bowels, or from the

bowels and kidneys. These cases are classed by the laity, and generally by physicians as cases of hemorrhagic malarial fever. These cases have a previous history of malarial infection, the skin has a yellow pallid dingy hue. We sometimes meet with malarial jaundice, with a previous history of chronic malarial infection, from which after a slight chill the patient passes more or less blood for a short time, and an abundance of bile from the kidneys. I am inclined to think that this is the class of disease that a great many physicians have met with, who assert great curative properties from the hypophosphite, and phosphate of soda, and others who rely entirely on spirits of turpentine, and whiskey, in the treatment of hemorrhagic malarial fever. The treatment embraces the same general principles of the management of other malarial diseases. In the congestive form of this fever we should give mercury, to be followed by salines; control the high temperature with acetanlid or phenacetine to be given every three hours with from six to eight grains of the sulphate of quinine; if the quinine is not well borne by the stomach, the bisulphate should be given hypodermically in 20-grain doses two or three times during each 24 hours, which is the safest way to give quinine in every case of this disease; morphine hypodermically administered is beneficial, and sometimes necessary to relieve great nausea, vomiting and restlessness.

The moderate use of ice and lemonade gives some relief by reducing thirst; a blister over the stomach seems to assist in relieving the engorgement of that organ. A sudden increase of the temperature, with cold extremities, should be met at once, with a full dose each of acetanlid, and some opiate, with a moderate drink of whiskey: rubbing the extremities at the same time with tincture of capsicum. The quinine should be continued

in full doses, as long as there is a tendency towards congestion, or as long as the fever remains high, after which it may be reduced to from 9 to 12 grains for each 24 hours. But if the patient is suffering from chronic malaria, or has been suffering from the effects of malarial fever a long time, we should be careful about giving him quinine in large doses, because he may have scarcely enough active red blood corpuscles to sustain life, and there is no doubt but that quinine in large doses has a depressing effect on the red blood corpuscles in the proper performance, of their functions in life, having a tendency to farther disorganize the already diseased red blood corpuscles.

Fowler's solution of arsenic, strychnine, the compound tincture of cinchona or chinoidine and the cautious use of mercury, followed by salines, and antipyretics for high temperature are the main remedies to be relied upon in this form of the disease. Quinine in small doses from 12 to 15 grains per day is safe, and beneficial. But if the case shows a tendency towards congestion, with marked periodicities of high temperature, with cold extremities, and a dingy hue of skin, it will have to be treated with large doses of quinine, regardless of what may have been the previous history of the case, or regardless of what we may think of the condition of the patient's blood, because it is the only remedy that can meet that condition, and will certainly not do the harm in the blood, that this malarial poison, in the blood, capable of producing this congestive character, will do. The kidneys act freely at first, but may soon act sluggishly, then we should prescribe some mild or sedative diuretic. Astringents are injudicious and should not be used except in cases of malarial fever with a hemorrhagic diathesis, in which the patient may have a free and true hemorrhage from the bowels and kid-

neys, and sometimes from other mucous membranes of the body. These cases are generally classed under the head of hemorrhagic malarial fever, and should be met in the beginning by large doses of ergot internally, or the hypodermic use of ergotol, to be followed soon by large doses of the muriated tincture of iron, strychnine, and arsenic, and the moderate use of quinine or chinoidine. The compound tincture of gentian in drachm doses, with one-fortieth to one-twentieth of a grain of bichloride of mercury, to be given every four hours, and later on three times a day, is a fine tonic to the gastro-intestinal mucous membrane, and the hepatic stimulant to be relied upon in this class of cases. And in the more malignant types of the disease, after the congestive character has subsided from the use of quinine, the patient may still retain the aggravated symptoms of icterus (which may at least be a complication at this stage of the disease), the moderate use of the bichloride is safer than the mild chloride of mercury. In the exceedingly mild cases, or cases of malarial jaundice with slight hemorrhage of short duration, and an abundance of bile from the kidneys, the compound tincture of cinchona in drachm doses with one-fortieth to one-twentieth of a grain of bichloride of mercury, to be given every four hours, with an occasional addition of ten minims of tincture of capsicum for the sick stomach, is a remedy of great utility, and after the first two or three days it should be continued only three times a day.

THE SURGICAL TREATMENT OF TUBERCULOSIS.

By Goldsby King, M. D., Selma, Ala.
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Tuberculosis of the lymphapic glands, bones, joints, genito-urinary organs, skin, and peritoneum is the result of infection by the bacillus tuberculosis. These diseased conditions are most commonly local. In all, early surgical treatment is required. When operations are demanded, the indications are to thoroughly remove all infected tissue, and to prevent septic infection. One of the most interesting of all tubercular diseases is, tuberculosis of the peritoneum. It is either a part of a general tubecular infection, or is a local disease.

Invasion of the peritoneum may occur, by way of the genito-urinary organs, the blood, or from tubercular intestinal, or mesenteric ulcers. The disease is of very frequent occurrence in females. In them it is most probable that infection occurs very often by way of the vagina, uterus, and fallopian tubes, during coitus, or examinations with infected hands or instruments. No age is exempt from the disease, although it is said to be most common between the ages of twenty and forty. Dr. William Osler (John Hopkin's Hosp. Rep., Vol. II, No. 2, page 70) has analyzed 346 cases with the following result: Under ten, 27; between ten and twenty, 75; from twenty to thirty, 87; between thirty and forty, 71; from forty to fifty, 61; from fifty to sixty, 19; from sixty to seventy, 4; above seventy, 2.

The onset of the disease may be very sudden, but is more often insiduous. The lesions within the abdominal cavity are very variable. In some cases, only a few scattered tubercles, with neither adhesion, nor ascites may be present. Whereas, in the severer form, the peritoneum is much thickened, covered by tubercles; with the adherent intestines, and the omentum thickened, and curled upon itself; forming tumor like masses. There is often a considerable quantity of a straw colored fluid in the abdomen that partially coagulates after exposure to the air. The uterus, ovaries and tubes are very often enlarged and firmly adherent. Clinically, the disease may be divided into those cases with ascites, and those adhesive forms in which little, or no fluid is present. Those, with ascites, are the only cases in which the results have justified celiotomy. The symptoms are generally very obscure, and misleading. In very many cases attention is first directed to the true character of the disease by the presence of ascites. Pain of a wandering and intermittent character is commonly present; as is also tenderness upon pressure. Dyspeptic symptoms, of an intestinal character, are prominent in nearly all cases. Pleurisy, with a dry cough, and without effusion, is not infrequent. The family histories of the patients are often good, and they may appear in vigorous health. For a long time the temperature in the morning may be sub-normal, with a slight elevation of temperature in the evening. Dr. Howard A. Kelly considers pain in urinating, the most characteristic symptoms. (Op. Gyn. Vol. II, page 139). Erythema in the region of the umbilicus is regarded by Dr. Henry (International Clinics, Vol. IV, 5th Series) as pathognomic. In order to be convinced of the truth, that in many of these cases a correct diagnosis is very difficult, and often impossible, without an exploratory incision; it is only

necessary to consider, that the modern treatment of this disease is the result of fortunate, and repeated accidents. Also that perhaps one-third of the operations which have disclosed the presence of tuberculosis of the peritoneum, have been undertaken for other supposed conditions after an incorrect diagnosis had been made. The diagnosis is made without difficulty, in cases with general effusion, in which the heart, liver, and kidneys are found to be free from disease, and there are no indications of malignant abdominal tumor. The diagnosis is easy in those cases, which accompany pulmonary phthisis. Also in those cases in which the tubercle bacillus can be found in the effused fluid, or in the uterine discharges, and scrapings. Unfortunately, however, the bacillus tuberculosis is not commonly found in the effusion. Tuberculosis of the peritoneum is most likely to be mistaken for ovarian tumors, malignant tumors, tubal diseases, dilated gall bladder, pancreatic cyst, hydronephrosis and typhoid fever. In some cases, a diagnosis between tuberculosis of the peritoneum, and ovarian tumor is impossible, as the clinical symptoms in both diseases are the same. In other cases, a bimanual examination may reveal a connection between the tumor and uterus. The absence of the tumor downward, and the change in precussion dullness, with the altered position of the patient, are important diagnostic symptoms of a sacculated effusion, occurring in tuberculosis of the peritoneum. Malignant abdominal tumors are usually of more rapid growth, and not associated commonly with tubercular affection in other parts of the body. In tubal disease, the usual history of attacks of pain followed by fever and of irregular menstruation can be obtained, and the diagnosis confirmed by a bimanual examination under anasthesia. From a dilated gall bladder, by its attachment to the liver, and the ascent and descent of the

tumor with respiration. From pancreatic cyst by an examination of the fluid after aspiration. In hydronephrosis there is the usual history of a tumor forming in the loin and disappearing, at times, with a free flow of urine. In typhoid fever the use of the microscope, the presence of the rose spots and the limitation of tenderness over the cœcal region, with the great difference in the temperature curve may make a correct diagnosis possible. The prognosis without operation is bad.

Some cases recover spontaneously, but the majority without surgical interference die from exhaustion. The general mortality directly traceable to the operation is stated to be about three per cent; but in the cases in which an early operation is done, and limited to a simple incision and flushing of the abdominal cavity, in all probability there could be no appreciable mortality. Nearly all the cases are benefitted, and about twenty to thirty per cent. permanently cured by an operation. The operative changes which take place after celiotomy for the relief of tuberculosis of the peritoneum, are very clearly illustrated in the following case, reported by Dr. Abbe (Medical Record, March 25th, 1899, page 437): "The patient was a woman who came to him about two and a half years ago. She was suffering from tuberculous peritonitis with marked ascites, and from a pleurisy with effusion, on the left side, presumably tuberculous. There was hectic, and dyspnoea was so pronounced that aspiration of the left pleural cavity was at once resorted to. The patient gradually grew weaker, and a radical operation was decided upon to relieve abdominal distension. On account of the dyspnoea, a general anæsthetic could not be employed. A medium laparotomy was therefore done under cocaine, and more than a gallon of turbid fluid was evacuated from the abdominal cavity. Both the visceral layers of the peri-

toneum were everywhere thickly studded with tubercles. Pieces of the parietal layer which were cut away and afterwards examined, proved to be tuberculous. The patient made a good recovery aud returned to her home out of town. Subsequently a small laparotomy hernia developed, for the cure of which the woman came back to New York about two months ago. The scar tissue was dissected out and the wound sutured afresh. During this second operation, it was observed that the peritoneal cavity had healed perfectly, no tubercles or adhesions being found. A thorough inspection of the peritoneal cavity failed to reveal any tubercles, while two and one-half years before the entire cavity, from the liver to the pelvis, had literally been studded with them. Since the first operation, the patient had lived in the country; she was the picture of health and had gained thirty pounds in weight. This case, Dr. Abbe said, served as a practical illustration of how the tubercle bacilli were destroyed by the efforts of nature alone, nothing having been done to the patient, except to open the peritoneal cavity and wash it out. The pleural cavity was never washed out; it was simply emptied. During the second operation, a small mass, about the size of a man's thumb, was found connected with the omentum, and fearing that it might give rise to trouble in the future, it was tied off, and removed. It was examined by Drs. Prudden and Wood, and found to be composed of a fibroid sack, containing tuberculous tissue, but no tubercles, showing that nature had encapsuled this part, which it had not been able entirely to obliterate."

Why simple celiotomy should be productive of such curative effects, has never been satisfactorily explained. Very many theories have been advanced in explanation. That the good results were due to the use of chemicals;

to the exposure of the peritoneal cavity to the sunlight and air; and to the effect of the removal of the effusion; but the most generally accepted theory is that which has been advanced by Mr. Lawson Tait, that the opening of the abdomen produces physiological changes in the peritoneum which makes it able to overcome and destroy the tubercle bacillus.

A short incision in the median line between the umbilicus and pelvis, is indicated in all cases, except those of the sacculated variety, in which the incision must vary with the location of the effusion. To avoid wounding the intestine, if adherent, great care is required when the peritoneam is incised. It is also very important to guard against the escape of sacculated fluid into the general abdominal cavity. Every focus of disease should be removed, whenever compatible with the safety of the patient, and possible in the diseased condition of the tissues. It is, perhaps, better in all cases to flush the abdominal cavity with normal salt solution, and to leave a part of the solution in the cavity, after the closure of the incision. That the cure of tuberculosis of the peritoneum has been the result neither of drainage, nor of the use of chemicals, has been fully established by clinical experience. It is, therefore, much better to close the incision without drainage unless the conditions were the same as would imperatively demand drainage after celiotomy for any other disease.

In tuberculosis of the peritoneum there is added to the usual dangers and disadvantages of drainage, the probability of a permanent fistula. Very little reliance should be placed in the use of chemicals within the abdominal cavity or in the dressing of the incision; as the cases do quite as well without as with these agents. Great attention should be given to a perfect closure of the wound. Perhaps as good a method as any for the treatment of

the incision is that in which a simple collodion dressing is applied, reinforced by the application of a square of mole skin plaster.

The wound usually requires no other attention, nor dressing, thereafter.

RETENTION OF THE TESTICLES, WITH REPORT OF CASES.

By L. L. Hill, M. D., of Montgomery, Ala.,
Grand Senior Counsellor of the Medical Association of the State of Alabama.

It is essential to a thorough understanding of an abnormality that we have a clear comprehension of the normal. This is especially applicable to the subject which I now propose to consider. Anatomists tell us that the testicles in early fetal life are located behind the peritoneum and below the kidneys. About the third month a slender band of unstriped muscular fibers, the gubernaculum testis, is observed, which eventually, in the marvelous process of development, connects the testicle with the bottom of the scrotum, As the fetus elongates the gubernaculum not only does not commensurately lengthen but progressively shortens, necessarily causing descent of the organ into the scrotum. The testicles are found in the scrotum at birth in eighty per cent. of all cases. Of the retarded twenty per cent. only one in a thousand finds permanent lodgment in the inguinal canal or abdomen. Professor Keyes reports descents as late as the thirtieth year. Less frequently they stray from the usual path and may be found in the perineum, the most common form of ectopy in man, and the natural position in some of the lower animals, as the pig. Having passed through the femoral ring they reach the thigh, or there may be penopubic ectopy.

Those which descend after birth are usually complicated with hernia and when permanently retained are often given to structural degeneration.

The cryptorchid is generally copulative but sterile, losing his spermatogenesis but none of the other attributes of masculinity, the sterility being determined in a given case only by a microscopic examination. Statistics show that the right testicle oftener fails to descend than the left. The chief accredited cause of abdominal retention is intra-uterine peritonitis. Non-descent may be due to the wearing of a truss or to shortness of the cord. An unusually small external abdominal ring may produce lodgment in the canal. Excessive development of certain fibers of the gubernaculum is responsible for aberrancy.

Having thus briefly considered in a general way some of the features of this interesting subject, I will report three cases that have come under my observation, with the treatment that was adopted.

CASE I.—E. B., aged twenty-four years, white, a clerk in a railroad office, applied to me in December, 1895, presenting an enlargement in the right inguinal region which he said had existed since his birth. He complained of an uneasy and disagreeable sensation which was accentuated when the bowels became constipated and distended with gas. The pain rendered him incapable of properly attending to his duties.

Upon examination I found an undeveloped scrotum and a retained testicle in the inguinal canal complicated with an irreducible bubonocele with which it was inseparably connected. Hernia is one of the most frequent complications of this form of undescended testicle and particularly dangerous on account of proneness to strangulation. Trusses, recommended with large concave pads to prevent an increase of the hernia and protect the testicles, are in the main unsatisfactory. I accordingly advised an operation for the radical cure of hernia and if possible transplantation of the testicle in the

scrotum, and if the latter was not found feasible, then a castration. To the partial emasculation he strenuously objected, which from the appearance of the testicle was more a matter of sentiment than anything else. Contrary to my better judgment I yielded to his entreaties and promised not to sacrifice the the testicle in case the scrotal transplantation failed, but to try to relieve him of his pain by a conversion of his retentio inguinalis into a retentio iliaca, and absolve him from the jeopardy of a strangulated hernia by radical operation, as much as possible after the method of Bassini. Owing to the shortness of the cord and my inability to carry the testicle to the scrotum even after I had thoroughly divided the musculofibrous funicular sheath it became necessary to do this. I considered the advisability of dissecting the globus major from the testicle and turning the organ upside down, an operation I had seen Mr. John Wood do some years before in London, but concluded even this additional lengthening would not carry it to its habitat.

More than three years have elapsed since the operation and the patient has attended daily to his duties and has suffered no inconvenience. Had I seen this patient early in life, when the hernia was probably reducible, I should have used the horseshoe contrivance of Wood and attempted to push the the testicle into the scrotum and at the same time restrict the hernia to the abdominal cavity. There are excellent surgeons who, when it is possible, return both hernia and testicle to the peritoneal cavity and apply a truss to keep them there if they are inseparable.

Case II.—E. C., aged twenty-five years, white, consulted me in February, 1896, on account of the absence of the testicles from the sac. I found both testicles retained in the inguinal canals. They seemed to be about one-half their normal size. It was impossible to push them through the external rings. The scrotum was undeveloped and measured transversely only half an inch. Aside from his desire for relief purely on grounds of adornment and development, their exposed position subjected them to frequent traumatism.

I advised an operation, to which he readily consented. Making an incision sufficiently long to well expose the testicle, I applied downward traction to the organ and divided the tissues of the cord transversely, barring the vas, vessels, and nerves. Passing my finger into the lower end of the wound I forced an opening into the scrotum for the retention of the belated testicle. Invaginating the sac, I sewed the testicle to its bottom with catgut. The aponeurosis of the external oblique was next closed with catgut and the external ring was left large enough not to interfere with the circulation of the spermatic vessels. The cord was sutured to the pillars of the external ring and the wound in the skin closed. In dressing the wound I used a compress of antiseptic gauze to aid in keeping the testicle in its correct position. Waiting until the wound had completely healed I repeated the operation on the right side. Since the transplantation the testicles and scrotum have developed to their natural size, and were it not for the scars a former abnormality would not be suspected. In cases of double retention like this only one side should be operated on at a time as I am satisfied the rudimentary scrotum could not have safely held both testes.

CASE III.—F. C., about six years of age, a son of a physician, was brought to me by his father for the relief of an undescended testicle on the right side. He was very anemic. The father stated that the testicle frequently became enlarged, and very painful and tender to the touch. Sometimes he could get a history of injury, but often he supposed it to be due to the contraction of the abdominal muscles. The child was an epileptic, the seizures coming on whenever there was any disturbance of the testicle and at no other time, and their frequency and severity were proportionate to the amount of irritation. I gave as my opinion that it was a case of reflex epilepsy and that the testicle should be released from its incarceration, preferably by anchoring it in the scrotum but if need be by extirpation. I performed the operation just as in the previous case and had the satisfaction a short time ago of receiving a letter from the father, a very intelligent physician, in

which he said that the boy was in good health and that "there had been no return of the nervous symptoms from which he suffered previous to the operation."

There are two features of special interest in this case, the first being that it was a genuine case of reflex epilepsy as shown by immediate cessation of seizures after the operation. The second is that there was a sudden rise of temperature to 106 degrees F., within twelve hours after the operation, at which point it remained for three days with slight variation, and then gradually declined to normal. The wound healed without suppuration. I do not believe the rise of temperature was a so-called post-operative rise, but was incident to an excitation of the thermogenic centers from the source of irritation, the impressionable impulse being transmitted through the sensory nerves.

Professor J. William White, of Philadelphia, advises the performance of these operations before the age of puberty. His opinion is entitled to serious consideration. To this distinguished surgeon is due great credit for having elucidated and popularized the means of relief.

TREATMENT OF HYPERTROPHY OF THE PROSTATE GLAND.

By Charles M. Franklin, M. D., of Union Springs.
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In the consideration of this subject the various methods employed naturally divide themselves into two classes: 1st. Those belonging to a palliative form of treatment; 2nd. Those surgical procedures which are radical in character. In this paper more attention will be called to the former measures, in as much as they are the ones we are most frequently called upon to practice, the radical measures being applicable to a comparatively small class of patients. In the treatment of every case of prostatic hypertrophy general and hygienic measures are of the greatest importance. The habits of the patient should be in accord with those of the strictest temperance. His indulgences in alcoholic drinks being as much restricted as possible. His food should be of a character that is found by experience to be easily digested, and never excessive in amount. The intestinal canal should be kept freely open by suitable measures. The urine of these patients is always a matter of much interest. It should be carefully watched and frequently examined. Numerous drugs have been recommended for keeping it bland and free from septic putrefaction. Lydston recommends oil of eucalyptus; Wyeth, salol and oil of gaultheria; Park, and others, urotropin. Numerous other drugs have received their proportion of praise. It has seemed to me that I have gotten my best results from the eucalyptus combined with salol. All

such drugs should be administered with care for fear of injuring the kidneys, which are already, so frequently diseased. The patient's strength should be maintained by tonics, and a moderate amount of open air exercise, avoiding such jostling movements as are produced by horseback riding, bicycling, etc. Very frequently a gouty or rheumatic diathesis exists and much benefit may be derived from the administration of colchicum, lithium or the salicyllates.

In the employment of local measures there are several indications to be met:

1st. The passage of steel sounds often enough to keep the urethra dilated and prevent as much as possible the progressive distortions which are so liable to occur. This measure finds its best application in cases which come under treatment early. If the enlargement is in the posterior part of the third lobe, or is of a dense fibrous character, it will prove of but little benefit.

2nd. We may in some cases reduce the œdema and congestion of the prostatic region by introducing the finger into the patient's rectum and stroking his prostate to the anus. This "milking of the prostate" should be done at intervals of six or seven days when tolerated. Warm baths and rectal enemata of warm water will sometimes give benefit as an adjuvant.

3rd. One of the most important indications to be met is obtaining a complete evacuation of the bladder. In the beginning of the case one daily, complete evacuation is sufficient; later, as the urine becomes more putrid, the intervals between catheterization must be shortened, and in some cases it may be necessary to leave catheter in, as a permanent drain, until the bladder symptoms ameliorate in severity. It is, of course, absolutely necessary that strict asepsis be practiced in all introductions of the catheter. It is advisable to

clean the anterior urethra by irrigations before instrumentation of the bladder. Of the various catheters the soft rubber Nelaton's are the best where they can be introduced, though stiffer ones are sometimes necessary. Metallic catheters, with so-called prostatic curves, are dangerous, and ought rarely to be used. Catheterization, where possible, should be done by the physician, though many patients daily "draw their own water," and live a life of comparative ease. Where catheterization cannot be accomplished, or a severe persistent cystitis or urethritis is present, it is usually necessary to make a suprapubic fistula either temporary or permanent. This, done after the method of Hunter McGuire, often proves itself a veritable Godsend and changes a life of misery into one of comfort. I shall briefly outline the steps of this operation. The patient is prepared as for any other operation. The pubes shaved and carefully cleaned. If possible his urine has been made acid beforehand. After the anæsthetic has been given his bladder is washed out. A rectal bag is introduced above the internal sphincter and moderately distended with water, six or eight ounces being sufficient. The bladder is now carefully injected with water, two ounces being sufficient. The water is retained in the bladder by tying a soft rubber catheter around the penis. An incision is made in the medium line from the symphysis pubis upwards for two and one-half or three inches. This is deepened until the bladder wall is recognized. This viscus is steadied and opened, the back of the knife being held close to the symphsis and its point thrust well into its cavity. The forefinger follows the knife into the bladder, so as to steady and keep it from receding. A soft rubber catheter is introduced through the opening. The water is now let out of the rectal bag, and as the bladder sinks into the pelvis the end of the catheter

is kept within it by pushing it along as the bladder recedes. After the wound has closed around the catheter a plug is introduced to keep the fistulous tract patent, and retained in place by a bandage. The plug is kept in, except during micturition. The stream of urine comes with force and some sphincter action is shown by the Recti Muscles. It is necessary that patients with these fistulous openings observe the strictest cleanliness, and that their urine should be kept acid, the free use of lemonade sufficing for this purpose. If there is atony of the bladder it is usually necessary to draw off the urine with a catheter introduced through the fistulous opening, the bladder being also easily washed out when necessary.

4th. Another indication in the treatment of hypertrophy of the prostate is to prevent or arrest septic infection of the urinary passages, usually the bladder. This is accomplished by irrigations, once daily or oftener if required. The irrigation should be as hot as can be easily borne, and may consist of solutions of boracic acid, ten grains to the ounce—permanganate of potash, one to four thousand or stronger—bi-chloride of mercury, one to twenty thousand, or silver nitrate—one to two thousand. The bladder should be moderately filled and emptied until the solution returns clear. The solution may be introduced through a catheter, injected from the meatus, or through a fistulous opening.

There is a class of patients in whom the palliative measures outlined cannot be carried out, or prove ineffectual, and sometimes more radical ones are required. This fact has led to many ingenious and difficult operations. We will mention a few of the more prominent ones. Prostatectomy done through the urethra is unsatisfactory and dangerous, all such operations are practically abandoned with the exception of Bottini's,

which is again coming into prominence and appears just now to promise good results. However, it will take more time and experimentation before it can be adopted and be given a place first on the list. Operations done by perineal incisions alone are difficult, the growths are too far from the surface to be easily removed. Suprapubic sections with removal of projecting growth seem to be enjoying priority of claim for usefulness and ease of performance. This operation allows of inspection of the growths and their removal under the eye. This operation is frequently made more thorough by combining with it a perineal incision as done by Belfield. Alexander's operation is virtually a perineal one, made more easy by pushing the prostatic tumor near the surface, with two fingers introduced into the bladder through a suprapubic opening. This operation has met with a brilliant beginning, though its future is still clouded with uncertainty.

Bier and Willy Meyer have recommended ligation of both internal iliac arteries. This measure has received very little support, and is generally looked upon as a brilliant surgical achievement rather than a good therapeutic measure. Ramm first performed castration for prostatic enlargement; but White is entitled to the credit of working it out upon a firm basis. It has certainly been followed by good results in many cases, judging from reports. It is, however, an operation that is only indicated in a small class of patients demanding radical treatment—the soft parenchymatous enlargements in men over 65 years of age. It is sometimes followed by grave nervous disorders. It was first suggested by noting the diminution in size of fibroids of the uterus after ovariotomy. Let us hope the operation will not be entered upon with the furor which attended that of ovariotomy. Vasectomy as recommended by Reginald

Harrison seems to be followed by about the same results attendant upon castration, though less promptly. It seems to me that every case of prostatic enlargement should be given the benefit of a palliative treatment, and as long as this is attended with good results let good enough alone. If it fails, or for any reason cannot be carried out, make a suprapubic fistulous opening after the method of McGuire. If this fails to give relief, as it seldom does, then the radical operations may be considered. giving priority to the suprapubic prostatecomy, combining with it if necessary the perineal incision of Belfield.

CHRONIC HYPERTROPHIC RHINITIS.

By Henry Stanford Persons, M. D., Montgomery.

The necessarily limited time available for presenting a paper of this character leads me to preface my remarks with the statement that it will be quite impossible to accord that careful consideration which its great importance undoubtedly justifies. I use the words, "great importance," deliberately, for it scarcely seems to admit of controversy, that of all the multitudinous afflictions that are visited upon mankind, none are of more universal prevalence than *Chronic Hypertrophic Rhinitis.*

Definition: "The disease may be defined as a chronic inflammation of the mucous membrane lining the nasal cavities, and characterized, both by permanent dilation of the blood vessels, and increased thickening of the intra vascular tissues—and, eventually, resulting in the normal lumen of the nasal passages being so far encroached upon as seriously to interfere with free nasal respiration. And, too, what is of more serious import still, is the fact that the great respiratory functions of the pituitory membrane of serious exosmosis become obstructed to a notable degree, and, as a result, the mucous membrane lining the air passages below, is subjected to conditions so abnormal as ultimately to lead the development of secondary inflammatory processes in that region." (Bosworth.)

Entiology: Since the flow of blood through this membrane, in the course of twenty-four hours, is exceedingly

copious, it is apparent that no tissue of the body is so liable to undergo inflammatory changes.

Moreover, since the quantity of this blood-flow is not constant, being responsive to the climatic changes surrounding the individual, it is quite probable that to this, in a measure, may liability to the milder degrees of inflammation be attributed. Most of the authorities are agreed that "catching cold" is, in a majority of cases, conducive to acute inflammatory diseases of the nasal membrane, and that the *chronic* form is the result of repeated attacks of the *acute*, but such an eminent authority as Bosworth holds that very few cases of *chronic* hypertrophic rhinitis result from repeated attacks of the acute form but appear to originate previous to the acute attacks, the latter being only prominent features of the chronic morbid process. Undoubtedly, as I have suggested, climatic conditions are instrumental in the development of catarrh, but hardly, I believe, to the extent that is usually supposed.

In addition to what has been stated, it may be remarked that the disease often results from the inhalation of certain irritating vapors—*i. e.*, the pollen of certain grasses and flowers, also, the dust of woolen factories, machine shops, &c.

Tobacco, too, is accredited with producing much catarrh, and undoubtedly is responsible for the occurrence of *some*, but hardly so much, I believe, as is generally supposed.

In my judgment, the most frequent cause of hypertrophic rhinitis is a deflected septum, causing stenosis of the nasal chambers, and generally occurring *anteriorly*. As the best explanation of this theory has been offered by Bosworth, I shall here quote him. Says he, substantially: "During infancy and childhood, as we know, the cartilages and bones of the nose are soft and some-

what pliable, and, furthermore, are especially subject to injury. The child learning to creep, or perhaps walk, has a fall, and naturally strikes on the most prominent feature of the face. Or, in childhood or youth, in the rude and boisterous amusements in which children are prone to indulge, a blow on the nose is one of the most frequent of accidents. The effect of this is that, while in many cases it gives rise to noticeable symptoms (as when a true fracture occurs) still, in a large number of cases, the injury gives rise only to mere temporary discomfort, the symptoms soon pass away and the accident is probably forgotten. Now, in the case of fracture with resulting deflection of the septum, the symptoms may set in and develop with a considerable degree of rapidity; whereas, in other cases, where the blow has been less severe, a mild deformity takes place, a low grade of inflammation, possibly at one of the sutures of the septum, an arthritis, perhaps, ensues. This doubtless results from a separation of the two plates which form the septum, producing a bony or cartilaginous projection into one or the other nostril and which may reach its full extent at the time of the injury, or, may gradually develop as the result of a low grade of inflammatory action, and become more extensive in character as time lapses."

"If we study the effect of the simple mechanical obstruction to the entrance of air to the nasal passages during the act of respiration, we shall find, I think, that it will throw much light upon this question of the origin and development of catarrhal diseases in the nasal cavities. Now, with each act of respiration, that portion of the mucous membrane which lies immediately behind the point of obstruction becomes subjected to diminished atmospheric pressure. This diminished pressure acting on the soft, spongy tissue, covering the turbinated bones, results in a tendency to abnormal turgescence. This ac-

tion is probably very slight during the first few years after the injury has been received, but, as time goes on, there is gradually developed a permanent hyperæmia, or distension of the blood vessels. Furthermore, it may be noticed, that if the obstruction be but *partial*, this turgescence is developed in the narrower passage. If, on the other hand, the injury is such as to completely occlude one passage, all of the inspired air is compelled to pass through the opposite side, and we have the hyperæmia and hypertrophy developing in the open side. In fact, it is necessary for the development of this chronic congestion that a current of air should pass through the side affected, as we often see the membrane in that passage which is completely stenosed, as a result of a deflected septum, absolutely bloodless. Not only does it not become the seat of hypertrophic changes, but there is a certain amount of shrinkage, as it were, in the tissues—not the atrophy met with in atrophic rhinitis—but a bloodless condition of the vessels, due to abolition of function. The result of hyperæmia, of course, is to increase nutrition, and, finally, there results certain structural changes in the membrane, proper. The superficial blood vessels, and the venous sinuses of the membrane (more especially the latter) become excessively dilated, the walls lose tonicity, vascular control is impaired, while, at the same time, as a result of this hypernutrition, the intra-venous tissues become notably thickened, and, as a consequence, there results true hypertrophy—a permanent structural thickening of the membrane. The point that traumatism is the leading cause of so large a proportion of these cases of hypertrophic rhinitis is, I think, an exceedingly important one, and I therefore repeat that an essential point in this theory is the fact that the injury itself antedates the morbid symptoms, oftentimes many years, and the de-

velopment is essentially an exceedingly slow process."

I do not assert that deflections of the septum are the only causes of nasal stenosis, for doubtless it is true that anything which causes a narrowing of the nostril will tend to produce the same train of symptoms. And, too, improper hygienic environments, such as exposure, vicious habits, errors of clothing, &c., are also known to influence the production of nasal catarrh.

Gouty and rheumatic taints, I have never seen affect the nose, but tubercular and scrofulous conditions undoubtedly do.

Pathology: The changes resulting in the tissues of the nose when affected with hypertrohic rhinitis, I shall briefly mention in the following order:

(1). An increase in thickness of the epithelial layer. The outer layer of epithelium covering the middle turbinated bones showing fine ciliae, while that covering the lower ones may have these ciliae wanting in places. The whole mucuous membrane is markedly corrugated.

(2). Between the epithelial layer and the next, the adenoid, there is frequently a structureless layer—the so-called structureless membrane. When this exists it marks distinctly the line between the epithelial and adenoid layers.

(3). An increase of the adenoid layer and its capillaries. The adenoid layer is composed largely of myxomatous reticulum with numerous lymph corpuscules, the latter not being uniformly distributed. The blood vessels are large and distended with stagnated blood.

(4). An increase of racemose glands both in the adenoid and sub-mucous layers.

(5). The sub-mucous layer consists of a layer of myxomatous, or fibrous reticular structure, in which the venous channels are very much enlarged. The veins are so numerous and large that this layer resembles erectile

tissue. The connective is broader than that in true cavernous tissue, and has bundles of true muscular fibre. The arteries are scant and of the character called helicine.

(6). In the advanced stage of hypertrophy, the lymph corpuscules are absent, proving that possibly they may have been converted into connective tissue.

Symptoms: The most prominent symptom to the patient is stenosis, more or less complete, in each nostril. The respiration is usually interfered with—in some cases to a marked degree, and, as a result, the pharynx becomes dry and irritated, causing still more discomfort to the patient.

The common teaching is that hypersecretion, with discharge of mucous into the pharynx and running out anteriorly, is perhaps the next noticeable step in the disease, but I am disposed to believe that there is no hypersecretion, but rather a diminution of secretion; for, ordinarily, the mucous membrane of the nose secretes a pint or more of serum a day, which is taken up in the moistening air as it passes over the turbinated bones, and thus is disposed of imperceptibly. Now, in chronic hypertrophy, the nasal sinuses are congested, but the increase of connective tissue around them prevents, or lessens, exosmosis, by which means the serum usually escapes from the vessels, and a smaller amount of serum is given off. Not so with the mucous, however, for it is given off in larger amounts and with this there is an exfoliation of epithelium covering the membrane. These, with the reduced amount of serum produced, and which the stenosis prevents the air from taking up, form the discharge which is so prominent in this disease.

There is no tendency to the formation of crusts, or

inspissated mucous, nor to foetid or offensive discharges in this form of catarrh.

These symptoms, when present, prove that the disease is other than hypertophic rhinitis. Ulceration and hecrosis are met with only in syphilis, scrofula, and other grave diseases.

The cough which is usually present is often troublesome. It may be a dry, hacking cough, due to irritation, or moist, accompanied by profuse expectoration.

Diagnosis: An inspection of the nares anteriorly will show the membrane swollen and bright red, possibly pink, which will distinguish it from the scarlet color of an inflammation and the purplish color of a congestion. The membrane may be covered with a semi-transparent mucous. Back of the anterior extremity, if we can see so far, the inferior turbinated bones will show a rugous appearance, the middle being smooth and of a brighter red than the lower. The amount of space between the outer wall and the septum depends upon the extent of the hypertrophy. Examination posteriorly brings into view from one-third to a half of each naris. The inferior turbinated bones present pretty much the same appearance as in front, except that at the extremity there may be seen a round, whitish, "raspberry mass." The middle turbinated has much the same appearance, the "raspberry mass" being smaller. After this examination it will be well to spray each nostril with a four per cent, solution of cocaine and wait about five minutes for a further examination. Inspection then will show more space than before, the turbinated bones being contracted. Tne amount of contraction will depend on the amount of connective tissue, the contraction being in inverse proportion to the tissue. All of the tissues are smaller and paler than before the application of cocaine.

Treatment: The treatment of hypertrophic rhinitis is

not altogether so satisfactory as it might be. It is very seldom that marked relief cannot be given, but my experience is that this is not permanent. In the course of from two to five years, unless the patient changes his mode of life and moves to a different and better climate, there is a recurrence.

The treatment of catarrh is both local and constitutional, each form of treatment being dependent on the other. I shall first consider local treatment. This will be done under the following different heads:

(1). Sprays, douches, pigment, and powders.

(2), Caustics: as acids and electro-cautery.

(3). Snares and the other methods of direct removal of the hypertrophied tissue.

(*a*). First, then, to be considered are sprays. These, when used in the early stage of catarrh, have a markedly beneficial effect in checking the disease and relieving the distressing symptoms, but care must be used in selecting an atomizer, which throws a uniform and finely divided spray—free from large drops or a stream, else the medicine will not reach the diseased tissue in full, but only in spots, and the effect will be largely lost. It is necessary to have a pressure on the fluid of from eight to twelve pounds, and few people can produce so much with ordinary hand-bulb atomizers.

One of the best cleansing solutions in use is that of Dobell. Listerine and many other remedies are also in general use. To these an astringent may be added, as

Nitrate of silver, 4 grs. to the ounce,

Sulpho-carbolate of zinc, 2 grs. to the ounce,

Sulphate of zinc, 2 grs. to the ounce,

Rescrcin, 4 grs. to the ounce,

Tannic acid, 5 grs. to the ounce, and others.

Which prescription is selected will be a matter of

judgment, and this comes either by long experience or intuition.

Instead of watery solutions, oils may be used, particularly if there is much irritation. Liquid alboline, benzoinol, and glycoline, as well as many others, are used. With these oily preparations, may be employed camphor, menthol, oil of eucalyptol, and others. With all of these stronger sprays the applications should be made every other day, until the vaso-paresis becomes less marked, when the space should be lengthened.

(*b*). Douches—I can see no advantage of a douche over a good spray, and as there are disadvantages, I seldom either use or advocate the use of one. The principal disadvantage is that the patient is liable to strangle, and in the efforts at relief, some of the fluid is forced into the eustachian tubes, thus exciting an acute eustachian salpingitis, with a subsequent otitis media.

(*c*). The application of pigments in the treatment of catarrh has become almost obsolete.

(*d*). Powders are frequently used, particularly in the early stages, but the effect is more transient than permanent. Menthol, camphor, anti-pyrin, boracic acid and other drugs are employed. To either of these is frequently added cocaine hydrochlorate, in varying proportions. Nearly all "quack" catarrh remedies contain cocaine as the principal ingredient, and frequently the "cocaine habit" is formed by the use of one of these powders.

(2). After the various methods enumerated above have been given a trial without beneficial results, it becomes necessary to employ more vigorous measures; *i. e.*, adopt a form of treatment which will serve to remove some of the tissue, thereby giving more space in the nostril. The use of caustics in such cases is a favorite method of relief, and I know of no caustic so satisfac-

tory as chromic acid. This is a powerful deoxidizer, destroying the tissue in consequence; in the act of oxidation, it becomes converted into an inert and insoluble oxide of chromium, thereby limiting its own action;—and I have not observed its use to result in irritation. Of course, though, care must be used in its employment. The method of employing it is as follows: A small pellet of cotton is dipped into a four or six per cent. solution of cocaine, the surplus cocaine pressed out, and the cotton, by means of forceps, under good illumination, is then carried to the spot to be cauterized and left in contact with it, for from five to ten minutes. In the meantime, a small silver probe is dipped into a bottle of mucilage, and the surplus mucilage removed from the probe, which is then used to pick up four or five small crystals of chromic acid. This is then held in a flame and a small bead of acid forms at the end of the probe. When the tissue is properly cocainized, the cotton is removed, the bead of chromic acid is applied to the proper spot, under good illumination, and held in contact for from ten to fifteen seconds. If made necessary by the amount of tissue to be contracted, three or four spots may be touched before removing the probe. The nose is next sprayed with an alkaline spray to neutralize any surplus acid. This is important, as the chromates are poisonous. A small superficial slough is formed which serves to bind down the tissues. Later, if necessary, further applications may be made. After each application it is customary to spray the nose with Dobell's or some similar solution, to keep down any inflammation which might occur, though if the burning is properly done, I have never noticed that much inflammation will follow the use of chromic acid.

Trichlor-acetic is considered by many as good as, or perhaps better, than chromic acid. In applying it, an

applicator, cupped near the end, is employed—a very small amount of the acid being placed in the depression and carried to the point of application, the latter having been previously cocainized.

The effects of sulphuric and nitric acids are too caustic and too widely distributed to admit of their use in this connection.

(*b*). The electro-cautery, as a caustic, has many adherents, and is a very valuable instrument. The batteries may be either dry-celled or fluid-celled, or, in strictly office practice, one may employ a converter, attached to the electric lighting system of the city, and which changes and reduces the current to a suitable strength. After having decided to use the electric cautery, the surface to be burned should be thoroughly cocainized, and then the cautery knife introduced cold, and after reaching the part to be burned, the circuit is completed, the knife heated to a bright cherry-red, and an incision made of the required length. The knife is to be removed from absolute contact with the tissue while the current is on, otherwise, in pulling it loose, some of the tissue is torn and bleeding ensues. The current must be cut off before removing the knife from the nostril to prevent the accidental burning of healthy parts. One or more cautery incisions may be made at one sitting, or the result of the first burn may first be ascertained before making other incisions. The subsequent course of a burn is usually favorable. There is usually only slight pain and inflammation. Great care should be taken to avoid burning the septum. The patient should be seen every second or third day after burning.

In removing posterior hypertrophies, it is doubtful if burning by either acids or electric cautery should ever

be used, since there is great danger of involving the eustachian tubes and middle ear.

Seiss obtained favorable results by curetting these hypertrophies, using a small curette, with a long shank, which he passed through the nose, and gently scraped the enlargement, thus removing the epithelium. He claims that there is very slight bleeding, and a marked reduction in the size of the growth, so that it is rarely necessary to repeat the operation. This operation is also to be done under cocaine anæsthesia.

The best method for removing posterior hypertrophies is by the use of a Jarvis snare or some modification of it. The loop of a No. 5 piano wire, which is to be used, should not project so far from the end of the tube that any portion of it will remain projecting when the nut is as far back as it will go. To afford sufficient room for the operation, it is well to gently brush the intervening portion of the turbinated bone with a 5 per cent. solution of cocaine, so as to cause it to contract, but the posterior hypestrophy should not be touched by cocaine, else it will be impossible to grasp it in the loop of wire. The snare and nose having been prepared, the loop of wire being bent at an angle to the barrel, the snare is passed through the nostril until the pharynx is reached, when the flexibility of the wire allows it to pass over the enlargement. The nut is then turned until the enlargement is firmly grasped, when the operation is slower. To prevent bleeding, the operation should require about one-half to one hour, a turn of the nut being given about every minute or so. There is usually little pain, bleeding, or inflammation following the operation. For the removal of the growth which sometimes occurs at the anterior extremity of the inferior turbinated bone, a simple device is to transfix the growth with a needle, and pass the wire snare over it, cutting off the mass just

back of the needle. A myxomatous growth is sometimes seen at the anterior extremity of the middle turbinated bone, and it is best removed with a snare, or, if desired, it may be removed with a pair of cutting forceps.

In the general treatment of this disease, a patient should be advised to use cold water in bathing, if his condition is such as to withstand the shock. If unable to do so, he should at least resort to bathing the neck and shoulders every morning in cold water. This accustoms him to the cold and enables him better to withstand sudden changes of temperature. Again, it would be well for the patient to wear thin woolen underwear throughout the year, the additional thickness of clothing necessitated by cold weather, being included in the outside clothing. The general health of the patient, too, should be attended to, and tonics prescribed when deemed advisable. Sometimes it may become necessary to prescribe a more congenial climate, if it is found practicable to do so.

THE EPIDEMIC TYPHOID FEVER IN GLEN VULCAN, NEAR RIVERTON, ALA., IN 1896.

By Geo. T. McWhorter, M. D., Riverton.
Junior Counsellor, Medical Association of the State of Alabama.

The circumscribed epidemic of typhoid fever at Glen Vulcan, near Riverton, Ala., in 1896, is a striking example of the manner in which the contagion of this fever is conveyed from person to person through the agency of drinking water, which in this case, percolated through the gravel and sand and was clear, cool and apparently wholesome.

The mere fact of an epidemic of typhoid fever propagated in this way scarcely furnishes a sufficient raison d'etre for this article, as cumulative evidence is, at this time, hardly needed to show that this is the usual way in which the disease spreads; but the strict localization of the epidemic, the immunity enjoyed by susceptible families who were locally intermixed with the sufferers, and the obvious cause of this immunity in an uncontaminated supply of drinking water, justified, in the opinion of our honored president, a report upon it. In deference to his suggestion, I submit this paper.

Glen Vulcan, where the epidemic occurred, lies one mile south of Riverton, which latter place is on the south bank of the Tennessee river in the extreme northwest corner of Colbert county and of the State of Alabama.

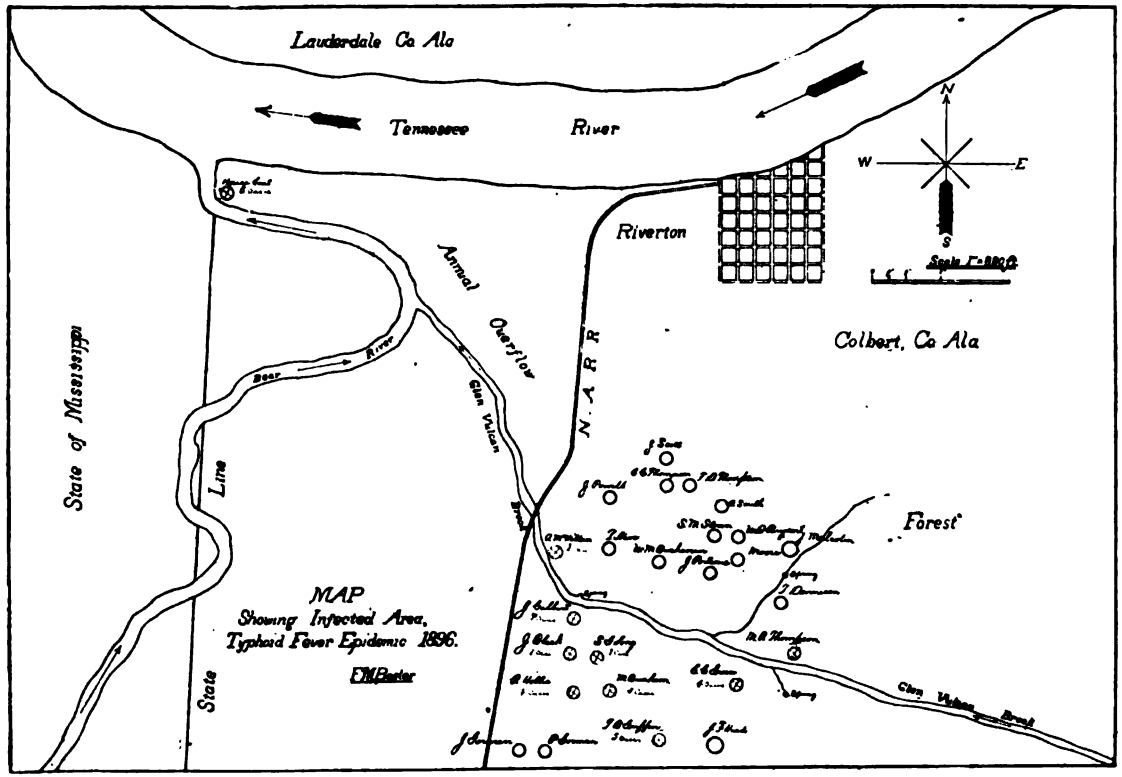
The glen is narrow, having an average width of but little over a furlong. It is about two miles long and extends in an east and west direction, the small, clear

stream which drains it flowing west and falling into Bear river, one half mile above the confluence of the latter with the Tennessee river.

The bottom of the glen is about four hundred feet above the sea level, the hills which bound it rising from one hundred and fifty to three hundred feet higher. The soil is silicious, the hills being composed largely of gravel mixed with layers of clay and sand and beds of chert. The whole region is in the geological formation known as the "stratified drift." The hills are clothed to their summits with a growth of oak, chestnut, hickory and short-leafed pine, and are exceedingly healthful as dwelling places, except along the river front where they are subject to malaria. The water that issues from the numerous springs at the foot of the hills is soft, freestone, clear, cool and delightfully potable. Many of the springs have a temperature as low as 60 degrees. The upper half of the valley is forested and uninhabited; the lower half is cleared and thickly settled.

The map submitted herewith is drawn on a scale of two decimeters to the mile, and shows the location of every inhabited house along the valley; the infected houses being marked in red circles and the uninfected in blue. The figures indicate the number of cases at each house. A glance at the map will show that the immunity enjoyed by suspectible households along the valley is probably the most striking feature of the epidemic. The exemptions would excite our wonder if we were not fully convinced of the fact that the germs of typhoid fever gain entrance to the organism through the intestinal canal.

Some time in January, 1896, a member of the household of Mr. M. R. Thompson, who lived highest up the valley, repaired to the brook to wash out some garments


Lauderdale Co Ala
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State of Mississippi
Bear
River
Glen Valley
Branch
Line
State
Forest
MAP
Showing Infected Area,
Typhoid Fever Epidemic 1896.
E.M.Baxter

that had been worn by a typhoid fever patient ten miles away. This proved, in a much closer and more literal way, than the phrase is usually employed, fons et origo of all the succeeding trouble.

Had this lustration been performed at the lower instead of the upper end of the valley, only the house-boatman and his family would probably have suffered, as no other cases of typhoid fever, excepted those connected with Glen Vulcan, occurred in Riverton beat, with its population of over a thousand, during the season. Unfortunately, the precise date when the stream was contaminated and the first case of fever developed, cannot be given. One of Thompson's sons died about February 22. As this young man had organic disease of the heart, and the disease, if typhoid fever at all, was atypical, this death is not included with those resulting from typhoid fever.

Thompson's family used water from the brook, or from a spring lying across the brook from his house. The brook ran within sixty feet of his door, clear and inviting. The spring was about seventy-five yards away. About this time typical cases of typhoid fever developed in the family of E. C. Green, who lived across the brook from Thompson, and about forty yards below the Thompson wash-place. Green used water from the spring above referred to, but his children, among whom all the cases occurred, drank freely from the brook. Of the four cases occurring at this house all recovered.

Fifty yards from Thompson's house and on the same side of the brook lived Thomas Dennison. His family, five in number, visited and waited on the Thompson and Green families during their illness. All of Dennison's family escaped the disease, although none of them had been rendered immune from having previously had it. His water supply was from a spring in a lateral and

much higher lying valley that could not possibly have been contaminated from the waters of Glen Vulcan brook.

Frequent among the visitors at Green's were the children of T. B. Griffin, who, like Green's children, drank from the brook. Typhoid fever, confined to the children, developed in Griffin's family, the five cases all ending in recovery. Griffin lived well back from the brook and used water from a well in his yard. Both he and his wife were susceptible, and two years later, when he had changed his residence, he had himself a severe case of typhoid fever. On this occasion, however, notwithstanding they nursed the sick children, both he and his wife escaped. The immunity of these two susceptible persons, neither of whom had drank from the brook, while nursing the sick children who had, is a very significant fact.

W. B. Moore, John Porteous, W. M. Buchanan, W. B. Bryant, Alex. Smith, S. M. Sloan, F. D. Thompson, John Scott and C. C. Thompson, though all living nearer the brook than Griffin, all had wells in their yards from which they used water, and all escaped the fever.

S. G. Long, who lived at a greater elevation above the valley than any of the parties named, but who used water from a so-called "spring" which rose in the bed of the branch below where the running water disappeared in the sand and gravel, had one case of fever in his family which resulted favorably.

James Gormon had a well from which he permitted his son, Pinkney, and some colored neighbors, viz: James Black, Moses Beachum and Rebecca Hollis, to use water. Later in the season when the water in his well got low, he cut off the water supply of the "brothers in black," forcing them to go to Glen Vulcan for the liquid. Typhoid fever developed in all three of the ne-

gro families. Of the nine cases that occurred among them one died. Both Gormon's family and that of his son, with whom he continued to share his limited supply of water, escaped the infection.

John Calbert and R. H. Davis who succeeded him in the same house, both of whom used water from a "spring" which rose in the bed of the branch, had fever in their families, the seven cases in the two families, all ending in recovery.

Thomas Nave, Sr., and his family, who had a well and drank from it, and James Powell, who had a spring in another valley across the divide from Glen Vulcan, both escaped the fever.

Allen McMillon, colored, who lived in the last house in the valley, like all the balance who drank of the poisoned waters of Glen Vulcan, paid the penalty in a severe case of fever in his family which terminated favorably after a tedious convalescence.

After passing McMillon's, the brook wandered off through the bottom lands to form a junction with Big Bear river. As these lands are subject to an annual overflow and no dwellings are built upon them, there was reasonable ground for the hope that the brook had fully accomplished its mission of ill, and would claim no further victims for the dread disease whose spores and bacilli it was distributing. But it was destined, however, to demonstrate by one more striking example, its potency for evil.

George Oliver, a Tennessee river fisherman, who with his family of seven dwelt in a house-boat on the Tennessee river, concluded when the fishing there became good, to drop around into Bear river and tie up awhile. Unfortunately for him, he moored his boat a few hundred yards below where the waters of Glen Vulcan entered the larger stream, and on the same side of the river.

When his tin bucket swung over the edge of his boat for its accustomed supply of the aqueous fluid which lay so abundantly about him, it probably dipped up, a thousand times diluted, perhaps, some of the bacterium charged waters from Glen Vulcan. At any rate, six cases of typhoid fever of a most virulent type quickly developed on the house-hoat. In much less than the time usually required for this disease to destroy life, his oldest daughter was a corpse. Himself and four very sick children recovered.

These cases were treated and reported to the County Medical Society by Dr. R. J. Moore, of Riverton, and the writer. Nothing in the treatment of the cases requires special comment. The usual antiseptic, disinfectant and supporting treatment was employed. A partial application of the Woodbridge treatment was made in two cases.

Here we have the example of an epidemic of typhoid fever, with over thirty cases and two deaths, affecting that portion of the inhabitants of a narrow valley who drank from the waters of the infected brook, while the residue of a populous community, and such of the residents in and along the valley as had a pure water supply, remained entirely unscourged by the disease.

NEUROSES SOMETIMES FOLLOWING OÖPHORECTOMONY; THEIR DURATION AND TREATMENT.

By W. E. B. Davis, Birmingham,

Junior Counsellor of the Medical Association of the State of Alabama.

The views on this subject have been very conflicting, divergent and extreme. The extremists on one side have claimed that double oôphorectomy meant the entire change of the woman's physical and psychic condition, making her unwomanly—even masculine—and a nervous and mental wreck, with a loss of all sexual desire. On the other hand, those of the other extreme have claimed that the operation was attended with no unpleasant phenomena; that the stoppage of the monthly flow only relieved the woman of a serious impediment to routine duty and pleasure; that the inability to bear children was relished by the majority; that there was no loss of sexual power; and that in many cases the sexual desire was greatly increased and the marital relation more natural. Between these extremes there have been all shades of opinions expressed.

That the removal of the ovaries is infrequently attended by very distressing phenomena can not be denied, and that nearly all cases suffer some from nervous disturbances, such as hot and cold flashes, palpitation, indigestion, cold hands and feet, etc., is a fact; but severe neuroses are the exception. I may say that the consensus of opinion is that the operation is attended by very much the same symptoms that are produced by the

menopause, except that the change in most instances is more stormy and of less duration. The following from Penrose is a pretty fair statement of the changes in-induced by the operation:

"The woman after double salpingo-oóphorectomy experiences the nervous and gastro-intestinal disturbances that so usually accompany the menopause, the phenomena of which may persist for one or two years.

The secondary sexual characteristics of the woman—the voice, the figure, and the growth of hair—are not altered if the appendages are removed during adult life. The case may be different if the appendages are removed in the undeveloped girl, in whom the ovarian influence is essential for complete development.

The woman loses none of her feminine attractions.

The emotions of the woman are unaltered by double oòphorectomy, with the exception of some cases in which the sexual desire is destroyed. Sexual desire is dependent upon such a variety of conditions, both within and without the woman, that it is difficult to determiue the amount of influence that removal of the ovaries exerts upon the feeling.

It is undoubtedly true that sexual desire is sometimes destroyed by the operation. On the other hand, the sexual desire is very often restored by the operation, which relieves the former dyspareunia, or painful coitus."

In the great majority of cases the distressing symptoms attributed to the operation have not been from that cause. Defective technique, which left behind suppurting areas with silk ligatures which remained months and years before coming away; adhesion with twisting and constriction of the bowel and displacement of the stomach all produce neuroses. The greatest source of error is in the conclusions reached from operations on

neurotic cases where the nervous trouble overshadows the local disease. The patient continues to suffer from her mental and nervous disease with all of the disturbances of the climacteric added. This class of operations has brought pelvic surgery somewhat into disrepute and given the neurologists grounds for the great fight they have made against the claim that ovarian disease is an important factor in the production of mental and nervous troubles. At the meeting of the American Association of Obstetricians and Oynecologists at Pittsburg last year, I made the following remarks which are pertinent in this connection:

"I think that this country, which has been foremost in many good things, and particularly the Southern part of it, was also the cause of much harm in the enthusiasm of surgical procedures for the relief of nervous troubles. You will remember the late Dr. Batty, unquestionably the father of pelvic surgery, did all of his operations without any knowledge or conception of the pathological condition to be relieved. In other words, he operated for symptoms. He repeatedly stated that he removed the ovaries in cases which he felt he could not relieve by other treatment. The operation was frequently done in cases where there was no local desease with bad results, consequently the neurologists became prejudiced against surgical procedures for the relief of pelvic trouble. No doubt the teachings of Dr. Batty have led largely to the prejudice that is manifested now by neurologists. Of course Dr. Batty and his followers were misled in many cases. We know how hysterical women may be operated upon and sometimes relieved, it makes no difference what the operation. An operation on this class of patients seems to relieve for a time even though nothing is removed. In our State, Dr. Batty operated on a number of cases at the Institution

for the Insane. As Gynecologists, we know that we accomplish the most good in those nervous cases where we find marked pathological conditions. The more local disease we are compelled to remove, the sooner the patient gets well, and the less the disease and the greater the amount of nervous trouble, the slower is the case to recover. Neurologists expect too much in cases of pelvic disease that have progressed perhaps for fifteen or twenty years. If these patients do not get relief at once, the operation is put down as a failure. We might just as well expect a man who has had financial reverses, or who has been losing a large fortune for fifteen years, to have his nervous system restored by the restoration of his money. We know the nervous system does not recover so quickly. Unquestionably in cases where we find marked neuroses, they are instances in which the women have a predisposition to nervous and mental disease, as has been pointed out by the neurologists."

The above views were endorsed by McMurtry, Reed, Gilliam, Carstens and others. Dr. McMurtry said in the same discussion:

"The physician who assumes such cases has great responsibility, as well as an enormous amount of labor in inaugurating a system of education to get patients out of this condition. It is necessary to have nurses who are companionable for these women and capable of making life worth living, creating a healthy atmosphere, inspiring them with healthy ideas about life, and doing everything to build such women up, together with other remedial measures. A great many of these cases are not suitable for surgery, and whenever surgery is resorted to, in cases where there is only a slight departure from the normal condition, such as endometritis and

menstrual disorders which may be the cause of the nervous disorders, it is a mistake."

The concensus of opinion was that there were but few grave nervous disturbances following the operation, except in cases of neurotics; that many cases were operated on for symptoms—gross lesions not being found; that nervous symptoms were sometimes cured after such operations, (gross lesions being absent) but the cure was due largely to the rest which the patients received after operation and not to the operation.

Many of the cases requiring operation have had their nervous system greatly exhausted by prolonged suffering and the phenomena following the operation are due to this and not to the loss of the organs. It is the mental and nervous state of the patient more than the loss of these organs that brings about the distressing phenomena attributed to their removal.

I quote the following from a paper by Dr. Sherwood-Dunn:* "Professor Brown-Sequard believed and taught as a principle of physiology that every gland, whether or not provided with excretive ducts, gives to the blood a certain useful principle, the absence of which is felt and made apparent after its extirpation or the destruction or modification of its functional activity by disease.

These various troubles and functional derangements, which are constant though variable in degree, in women who have had the menopause anticipated by castration, form to my mind one of the strongest arguments in support of the glandular theory.

From observation made upon 100 cases operated upon in Broca and St. Louis hospitals, at Paris, I found that where the women had prematurely lost both ovaries, 78 per cent. subsequently suffered a notable loss of memory; 60 per cent. were troubled with flashes of heat and

* Transactions America Association of Obstetricians & Gynecologists, Vol. X.

vertigo: 50 per cent. confessed to a change in their character, being more irritable, less patient, and some of them so changed as to give way to violent and irresponsible fits of temper; 42 per cent. suffered more or less from mental depression, and 10 per cent. were so depressed as to verge upon melancholia. In 75 per cent. there was a diminution in sexual desire, and some of these claimed they experienced no sexual pleasure; 13 per cent. were not relieved of the pain from which they suffered; 35 per cent. increased in weight, and some became abnormally fat. Some complained of a diminution in the power of vision; 12 per cent. noted a change in the tone of their voice to a heavier, more masculine quality. Some 15 per cent. suffered from irregular attacks of minor skin affections; 25 per cent. had severe headaches, as a rule increased in intensity at the catamenial period. Equally as many complained of nightmare, more or less constant, while about five per cent. suffered from insomia. In a few cases there existed a sexual hyper-excitability not present prior to the castration. I particularly noted a few cases presenting chiefly gastric reflexes, where without any premonitory symptoms or apparent cause, the stomach would reject food, or refuse to prepare it for intestinal digestion, and the consequent distress following the fermentation compelled the patient to seek relief."

The views expressed by Dr. Dunn were dissented from by those who took part in the discussion. Dr. Carstens said:

"In many cases we find that the tubes and ovaries have absolutely nothing to do with the morbid condition of which the woman complains. The trouble lies in the nervous system, the spine, or brain, something of which we know definitely nothing. We cannot diagnosticate these cases accurately. Even if the

ovaries and tubes are removed, the woman does not get well; she gets worse and worse; new nervous symptoms are added; the brain becomes affected; she has a weak mind, etc. An operation is useless in these cases. There is not one of us who does not see cases every week or two presenting a train of nervous symptoms which go from bad to worse. The friends of these patients realize that eventually they will become insane, and consequently they bring these patients to us, thinking and believing there is some trouble with the generative organs. Perhaps the women may have a little pain, or she suffers from dysmenorrhea; we examine her thoroughly and find no trouble. We think an operation will not do any good and therefore refuse to operate. The physician of less experience is apt to conclude that there is something wrong with the ovaries and tubes, and he is anxious to do an operation, believing that it will cure the patient. He operates, the woman apparently recovers; but she is not cured. Such operations bring surgery into bad repute. The symptoms presented by one patient may be due to a pus-tube, while in another the diseased condition is entirely different. The point I wish to make is this—that the symptoms which Dr. Dunn attributes to removal of the ovaries are not due to this at all, and have absolutely nothing to do with it. The symptoms are further advanced than those for which he removed the ovaries and tubes, and which the woman had before she was operated on." I quote the following from Dr. McMurtry: "I would offer my own experience in opposition to the statements made as to the subsequent history of women who have had operations performed for the removal of the uterine appendages. This is very important on account of its influence with the laity. The change described by Dr. Dunn as taking place in the physique of women due to

the production of the artificial menopause are exceptional. I have known them to suffer with the discomforts incident to induction of the menopause, but I have seen none of the physical changes that have been described, such as change in the voice, the manner, irritability of temper, etc. When women have affections, either structural degenerations, neoplasms, or inflammatory conditions that necessitate the removal of the appendages, they are improved in every respect by the operation so far as my observation goes.

Dr. Cushing stated: "With reference to the baneful effects of removal of the ovaries on the mind and disposition, I have failed to see them. I have seen many women who have suffered after laparatomies, but it was because the uterus was not removed at the primary operation, or because there were adhesions or lumps of silk ligatures left. With good, clean surgery and the thorough removal of whatever is diseased the women do not suffer from mental, nervous, and neuratic symptoms afterward."

Dr. Rufus B. Hall said: "The facts are that the nervous manifestations following the operation for the removal of the ovaries, so far as my own experience goes, do not differ very materially from those of the normal menopause, except in a few instances in young women. In these cases the nervous manifestations have been more exaggerated and in a large per cent. of cases of shorter duration than those in which the menopause is normally established."

The mental state induced by the abrogation of the child-bearing function is greater than has been claimed by many. For the first years after the operation there may be little concern on account of this deficiency. Later it often causes the patient to become restless, discontented, and despondent. In one case in which I re-

moved the ovaries in a very nervous case the patient afterwards became morbid in her desire to have children, and two years after the operation I was informed by her friends that she had become a mother. Of course she had deceived her neighbors and I did not make any effort to enlighten them. One of Dr. Batty's patients practiced the same deception. I have operated on young women, and, at the request of their families did not inform them of the nature of the operation. I now have under observation a very beautiful young married woman who was operated on four years ago; a portion of one ovary being unavoidably left, who still menstruates and is looking forward to becoming a mother at some time. She was extremely anxious to bear children at the time the operation was done and had she been informed of the true nature of the case it is impossible to determine the amount of mental depression she would have experienced.

It has been well said by Kelly that "Ovulation and pregnancy under suitable condition, are to a degree utterly unappreciable to the male mind, essential elements of woman's happiness. To dwell upon this point would be but to reiterate what any attentive surgeon may gather from his daily experience in the consulting room, and to rehearse well known facts in the history of womankind."

Young unmarried women who are willing to have any operation to be relieved of their present suffering, after being cured become very unhappy and despondent because of the partial impediment to entering the marriage state. I have had such cases. Some of my patients have never been informed of the true nature of the operation and are happy in their ignorance.

Since the ill effects of castration in women it becomes a question of importance to determine whether we can in any way substitute the lost ovarian tissue, and to this end two lines of experiments have been tried.

* E. Knauer (Cen. f. Gyn. No. 20, May 16, 1896, in a communication entitled Einige Versuche uber Ovarientransplantation bei Kaninchen) has shown that the ovaries may be completely severed from their normal surroundings and successfully transplanted either to a part of the broad ligament, or between the muscles of the abdominal wall.

In one of the rabbits experimented upon and examined six months after the transplantation, one ovary excised and implanted in the broad ligament was found as big as a lintil and abundantly nourished, with a normal stroma and numerous follicles of all sizes containing ovules; a number of degenerated follicles was also found, perhaps more than usual. An ovary implanted in the fascia of the abdominal wall was only about a third its original size, but was in other respects normal.

The important conclusion may therefore be drawn that the ovaries may be transplanted even to a distant point differing widely from their normal habitat, where they will not only grow, but will also continue to develop normal Graafian follicles. It still remains to be shown whether these follicles rupture, and of what use transplanted ovaries may be to the animal economy.

The second line of experimental substitute of the lost ovarian tissue is that of feeding to the woman deprived of their ovaries one of the various organic juices. This has been tried by R. Chrobak (Centr. f. Gyn. No. 20, May 16, 1896,) in a few cases with distinctly encouraging results.

For four years I have preserved an ovary or part of an ovary in the great majority of cases operated on, and it is gratifying to note the growing sentiment in favor of the conservation of these important organs.

* Operative Gyneology—Kelly.

SANITATION OF PRISONS.

By Wyatt Heflin Blake, M. D., Wetumpka.

Senior Counsellor of the Medical Association of the State of Alabama

At the request of our worthy president I have prepared this report. I shall also have something to say concerning the prisons of our own state.

The housing of large bodies of men, whether they be workmen in frctories, soldiers in barracks or prisoners in confinement, requires the best thought and the most careful attention.

If any class need more consideration in regard to the hygiene of his dwelling than another it assuredly is the inmate of our prisons. He is compelled to occupy whatever accommodations the authorities provide him, and to endure whatever condition they may determine. Unlike the pauper or the soldier, he is not allowed to communicate with the outside world, hence it is important that the condition of our prisons should be the best. Dr. Rohé in his work on Hygiene says: "The mortality of convicts, even in the best regulated prisons where especial attention is paid to the sanitary requirements of such buildings, is three times as great as among workmen in mines, confessedly one of the most dangerous occupations." Imprisonment cuts short the expectation of life twenty years. A few men at 40 has as long an expectation of life as the prisoner at 20. Confinement lowers the vital force and causes the system to yield more readily to acute diseases.

The time that should be alloted to this report will prevent my going into the details of prison construction, methods of ventilation, heating, etc. Many things of importance to a well ordered prison must go without notice. I shall call your attention to only a few of those vitally important requirements of a sanitary prison.

Food should be plentiful, well-cooked and containing proteids, fats and carbohydrates in such proportions as to constitute a healthy diet. The ration for convicts in Alabama is about the same as that furnished by the United States government to its soldiers. Contractors are required to furnish daily to each prisoner ¾ pounds of salt bacon, or in lieu thereof ½ pound of bacon and one gill of molasses, together with an ample supply of flour or corn bread and vegetables. The bread is given them without limit. Once each day they get coffee and sugar. Once a week each man gets 1½ pounds of fresh beef instead of his allowance of bacon. They get vinegar and salt, and once a week each man gets ¼ pound of chewing tobacco. Under the head of vegetables they get peas, beans, turnips, cabbage and sweet potatoes. We have but little sickness among state convicts that may be attributed to improper diet. Of the total number of deaths for 10 years past, 7½ per cent includes all that have died from diarrhea and dysentery, both acute and chronic. Of this 7½ per cent, a safe estimate, based on numerous postmortems reveals the fact that two-thirds of them were caused by mesenteric tuberculosis. This leaves only 2½ per cent of deaths from diarrhea and dysentery other than of tuberculosis origin.

The use of water will next engage our attention. Water is one of the prime necessaries of our existence and ranks next to air in the influence it exercises on the processes of human life. Physiologists teach us that it composes nearly two-thirds of the tissues of the animal

body, and that water is constantly being evaporated by the skin, exhaled by the lungs and excreted by other organs. Water is the common carrier that goes to every tissue of the human organism, laden with the elements of nutrition; these it deposits, and in turn takes up and bears away the waste products of the body. We should see to it that this element which plays such a constant role in our vital processes should not itself be the bearer of the germs of disease. It is too often the case that there is "death in the cup" when its contents are the most clear and sparkling.

Faggs relates that in an English prison, whose water supply was from the Thames, dysentery had long prevailed to an alarming degree. The river water was abandoned and the prison supplied from and artesian well. No other change was made. Dysentery disappeared and for 18 years only one death occurred in the prison from that disease.

Parks relates that in 1834, three vessels left Algiers for France loaded with soldiers. The troops were all well when they left Algiers. All three vessels reached France the same day. On two of the vessels not a man was sick. On the third vessel 13 had died during the voyage and 98 of the 107 survivors suffered from paludal fevers. The two vessels exempt from sickness had been supplied with pure water. The vessel on which sickness occurred had been supplied from a marsh. The health record of the town of Selma in our own state before and after the use of artesian wells is familiar to us all. The importance to every prison of a bountiful supply of pure drinking water can not be overestimated. It should be well ærated; should contain not more than 1 to 50,000 of the salts of lime, iron or magnesia, and should be practicably free from organic matter. The water we drink performs the double function of carrying nutri-

ment to the tissues and also of carrying away the debris of broken down tissue. The work of repair is no more important to the health of man than is the removal of the products of waste. "We constantly bear about with us the effete debris of our living selves."

Bouchard has determined that in 52 hours a man excretes enough poison to kill himself; that is, that quantity of effete matter thrown from the healthy body during 52 hours, if retained would produce death. In this connection the experiments of Dr. Sanquirico of Sicna are of special interest. They were made in 1887, and published in the Medical periodicals of that date, Two sets of dogs and guinea pigs were poisoned with the same doses of strychnine, chloral, alcohol, aconitine, parldehide, and caffeine. Into one set was injected a saline solution in quantity amounting to 8 per cent of the animals weight. The other set was nutreated. The results were truly wonderful. The animals into which the saline solution was injected all survived. The others all died. From these facts we are forced to the conclusion that if vegetable alkaloids can be diluted and washed out of the system before their toxic effect is complete, why can not animal alkaloids be treated in the same way as well?

A bit of my own experience is in point just here. Four years ago a highly fatal epidemic of scarlet fever invaded my town. I lost a number of patients, most of them dying from uremic poisoning. I realized that the high fevers must result in a rapid breaking down of the tissues of the body, that the blood was overcharged with the products of waste, and that a failure on the part of the kidneys to eliminate this nitrogenous waste matter was the cause of death. I also reasoned that if food were given to patients with high temperature, that it would be only imperfectly digested, and that that portion

of it which entered the blood would not be assimilated, but would only add to the task of the already oxertaxed kidneys, whose function was impaired, but on whose continued action depended the life of my patients. In treating subsequent cases I left off giving food to these patients, but gave them water freely from the beginning. This was continued in some cases for several days. Under this management my patients did much better. I confidently believe that these cases show the importance of a free use of water for the solution and dilution of the waste products of the blood.

The State convicts of Alabama suffer very little from those ailments that may be attributed to impure drinking water. For 10 years past only 2½ per cent of deaths were from diarrhea or dysentery of non-tuberculous origin. For the same length of time there have been only 3 deaths from typhoid fever, except at Pratt Mines where there was 18. There has not been a death from typhoid fever at the penitentiary at Wetumpka in 10 years. Here the water supply is conveyed to the prison in pipes from a spring about 400 yards away. At prison No. 4 in Montgomery county, there has never been a death from typhoid fever. There water is supplied from an overflowing artesian well 400 feet deep.

Authorities all agree that the matter of most importance to the health of people is the air they breathe. "Statistics prove that impure air is one of the most important causes of death." "Of all conditions," says Murphy and Stevenson, "that are prejudicial to the healthfulness of the dwelling, air that has been rendered impure is the most productive of evil." These impurities are of two classes; first, those that have their origin outside the dwelling, such as malaria, noxious gases from slaughter houses, fertilizer factories, etc; second, that class which have their origin within the dwelling itself.

To avoid those impurities originating on the outside, prisons should be built on elevated ground, distant from marshes or ponds and a considerable distance from all manufacturing establishments that are liable to contaminate the air. In the country is preferable, since city air contains ten times as many germs as does country air. Those impurities originating within all occupied buildings deserve most careful attention. The average man exhales from his lungs fourteen cubic feet of carbon dioxide in 24 hours. Thirty-two ounces of fluid passed off from his body in in the form of perspiration. The whole surface of his body is constantly shedding its epithelium. Lights and the refuse of food add their share, that highly poisonous gas, carbon monox, entering into the list. Physiologists are agreed that if carbon dioxide is present in respired air in a greater ratio than 7 to 10,000, it is a menace to health. The laws of hygiene demand that the average individual should be furnished 3,000 cubic feet of air every hour in order to keep the carbon dioxide down to the required limit of dilution. A space of 500 cubic feet per man requires a complete change of air six times per hour. English prisons of modern construction provide 800 cubic feet per man.

The contaminating effect of exhalations from the body on surrounding air is only imperfectly understood. In his work on hygiene, published in 1897, Rohe begins his chapter on air with this statement: "Exact investigation into the influence of the atmosphere on health is yet in its infancy."

Dr. Notter, an English authority, says: "In addition to carbon dioxide, man exhales from the lungs organic matter, the nature of which has not been precisely determined. It is odorous, putressible and oxidable. It yields ammonia and is therefore nitrogenous. It is doubtless of mixed origin and contains particles of epi-

thelium and fatty matter from the mouth and pharynx, and in some cases, organic effluvia from the stomach."

Neither has the amount of this complex substance been exactly estimated. It is demonstrated that the pernicious effect of breathing respired air is far in excess of the asphyxia caused by the carbon dioxide it contains. Pettenkofer has found that the carbon oxide in respired air is indirectly a measure of organic impurity from respiration. What this organic matter is no one accurately knows, its toxic effect all must admit. In a recent number of the London Lancet, Dr. Hartley says: "Close rooms and a lack of ventilation are responsible for much more illness than we realize. It was long ago pointed out that certain constituents of expired air are intensely powerful nerve poisons. These considerations should cause us to look on re-breathed air—not as a mere carrier of accidental poisons—but as a poison *per se*." Du Bois Raymond has denominated this poison authropotoxine. Dr. Hartley further says: "It is difficult to resist the impression that an overdose of waste products whether of ones own or other peoples, must generally interfere with the metabolism of nerve tissue. It must I think, sooner or later, be recognized that many of the increasing ills which it has been the fashion to charge on the hurry and brain fag incidental to a high state of civilization and a large population, are in reality due to the greater contamination of the air we breathe by the waste products of that population. If this be true the present ideas concerning ventilation must be abandoned as utterly futile and the need will be felt, not of letting a little air in, but of letting waste products out." We are all familiar with that feeling of headache and malaise after remaining for a time in an overcrowded church or hall. Is there any abomination to which we are subjected more fraught with danger than the overheated,

poor ventilated railroad cars which every winter makes familiar to us all.

Overcrowding *must* bring disease. In regard to our prisons I will venture the assertion that there is not a jail in the State of Alabama whose construction provides the cubic space and ventilation demanded for the health of its inmates. The space in the negro department of the Montgomery county jail is 630 cubic feet per man. To furnish the inmates enough air to keep from becoming poisoned with their own exhalations will require a complete change of the contained air every six minutes. From an inspection of the jail it is evident this is not done. This is only an example of what may be found elsewhere in Alabama. In the Jefferson county jail the space is 255 cubic feet per man. The smallest space in Mobile county jail is 295 cubic feet per man. The individual space where convicts are kept is in many cases too small. At Wetumpka in the main prison it is 520 cubic feet per man. At Coalburg the smallest space per man is 350 cubic feet. In the main hospital ward at Wetumpka the space is only 294 cubic feet per man. In the hospital for whites it is only 295 cubic feet, and in this ward consumptives are kept with men sick of other diseases.

The greatest fault in the prison management of Alabama is to be found in construction that does not provide adequate ventilation. The respiratory organs suffer most from a lack of fresh air. Military records show that soldiers are healthier in the field under the rudest shelter than in overcrowded barracks. Dr. J. B. Gaston tells me that as surgeon in the confederate army he observed that when the soldiers slept in tents consumption was almost unknown and pneumonia was rare except as a sequel of measles. Natter tells of the English soldier, that in the Afghan war, pneumonia was

very prevalent and fatal in the overcrowded barracks, while there was not a single case among those in tents. Distributing the men in tents had the effect of at once stopping the disease. For several years the death rate at Coalburg from pulmonary diseases has been high. About 18 months ago I decided to ventilate the cells more freely, and accordingly had planks removed from the walls near the ceiling, making a continuous opening all the way round the cells. Since that time the death rate from pneumonia has fallen off 44 percent below the average for the preceding year, and 33 per cent below the death rate of the lowest of any one of the preceding years. For the same time, at the same prison, the death rate from consumption has fallen off 43 per cent below the average for those preceding years. No other impor tant change was made in the hygiene of this prison. The time is short for comparisons, but I give you the figures as they are. Consumption brings death to more convicts than all other diseases combined. Rhoe says it causes from 40 to 80 per cent. of these deaths. His estimate is for the United States as a whole. For ten years past it has caused 38½ per cent. of all deaths among State convicts in Alabama. In some States the rate is lower, in others higher. Consumption causes more than 50 per cent. of all deaths among the convicts of Texas, and in Tennessee more than 65 per cent.

In Alabama, prison conditions are specially favorable for the development and spread of this disease. Not a prison in the State where convicts are confined allows an air space of 600 cubic feet per man. With even that amount of space hygiene demands that there be a complete change of this inclosed air every twelve minutes. In our prisons from 50 to 100 men, including consumptives, unless actually ill, are confined together in a single large cell. The results are just what would be expected,

a high death rate from consumption, and a new crop being prepared all the while to take their places. There is but one course to pursue to meet this condition. It is a complete separation of the tuberculous from the non-tuberculous prisoners, and to provide all a more plentiful supply of fresh air.

PROTOPLASMA AND ITS RELATION TO LIFE.

By G. Hartung, M. D., Cullman, Ala.

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The scientific part of the study of medicine is dependent on the knowledge of natural philosophy and natural history, and even the brilliant practitioner cannot avoid to notice occasionally the advances made in this direction.

One question, which has profoundly interested the physicians of all ages, is that of the origin and the seat of life and heredity. Although thousands of years may lapse before this secret is unveiled, if it ever shall be, even the stage of researches of the present day in this direction is most interesting to physicians.

Only about half a century has lapsed since Hugo von Mohl introduced in the scientific language the term "Protoplasma." He so named the nitrogenous, movable, finely nucleated mucus, which is contained within the cell walls of all plants. The fact, however, is that the protoplasma manufactures the cell walls and secretes the watery fluid that fills older cells for the most part. In the animal kingdom we meet frequently cells without walls, the so-called naked cells, which expression, properly considered, is a nonsense.

Microscopical researchers occupied themselves for a long period exclusively with the walls of the cells, the protoplasma forming only a thin layer on the inside of the wall, escaping notice, and the watery fluid filling

the interior of the plant cell. An analogue may be found in the sea shells, which we often admire in the museums and which are nothing but the product of the animal that lives in the shell, while very little attention is paid the animal itself that secrets the beautiful shell.

The next step in the researches was, that the identity of the protoplasma of the plants with the so-called sarcode of the lowest animals, amœbae, etc., was established.

The protoplasma was at this period considered to be the seat of life. Later researches dethroned the protoplasma from this high function and gave to it the position of furnishing the nourishment for the nucleus.

It was now in the nucleus, where the investigations sought the nature of life and the phenomena of hereditary transmission.

But the nucleus had also to give up his honors, as it was discovered that every time when a division of the nucleus takes place, the signal was given by the centrosoma or nucleolus.

Considered from a chemical point of view, the protoplasma contains nitrogen in the form of albumin, which comes very near to the albumen of the eggs and which is the most complicated of compounds. The albumin was therefore considered as the base of life. The scientists hoped, that with the ability of artificial production of albumin, protoplasma could also be formed and the enigma of the origin of life would be solved. But the number of believers in this theory grew less and less, when modern natural science was able, to disprove the idea, that on the boundary line between living and dead nature, matter and life are synonymous.

With the dethronement of the protoplasma, the albumin lost also its nimbus, because further researches revealed the fact, that there exist no organisms, which

are composed exclusively of protoplasma, and no protoplasma exists that is composed exclusively of albumin.

Concerning the construction of the protoplasma, even the most careful researches by the aid of the latest accomplishments in microscopical technique, cannot give a clue. One searcher imagined to see under the microscope filaments in the mucus, another one believed to have discovered a connecting net work, a third one will have noticed that the mucus was composed entirely of minute nucleoli, but the experts in physics declare, that the imagination of the microscopists has seen those things rather than their eyes. The limit of what can be achieved by the microscope in this direction is reached at present and we remain in darkness on this point, except that we know the protoplasma to be a semi-fluid mucus. The faculty of movement of protoplasma remains also a completely undissolved enigma.

Taken in all, our knowledge of the substratum of life, after fifty years of diligent researches, is a complete X.

Much has been written about protoplasma, little has been definitely settled about this mysterious substance. We do not know how the protoplasma originated, nor do we know where the nucleus, the plastidæ, the centrosoma come from. The independence of these different cell organs from each other forces the searcher to repeat continually the question: Which is the essential part and the carrier of the hereditary properties of the organism?

Parallel with the evolution of our knowledge of the protoplasma as the seat of life, a radical change of views has taken place, concerning the nature of the forces that operate in the organism. In the first half of this century the doctrine of the so-called "vitalism" played an important role. The capability of forming organic compounds was one of its main supports. But when Woehler

in 1828, succeeded in preparing Urea without the aid of life and when other organic compounds followed, the theory of vitalism was severely shaken. Besides this, when the philosophers established the law of the preservation of energy, after they had proclaimed long ago the law of the perpetuity of matter, Vitalism suffered another defeat. It was then presumed that all the forces acting in the organism, were to be reduced in the last instance to the absorption and change of sunlight by the chylorophyll of the plants. Therefore matter and forces of the living bodies were subject to the general laws of physics and chemistry,

But here the question arises: how are to be explained the endless varieties of organisms, their conformability of internal and external structure and of physiological functions, together with the remarkable capableness of adapting themselves to exterior circumstances? Are these only mechanical incidences? The answer of Darwinism is decidedly affirmative, taking advantage of its doctrines of the fight for existence and of the natural selection. It was reasoned, that this variegation, this conformability had worked themselves out by infinitely diminutive changes during an indefinitely long series of centuries.

The last support of the theory of vitalism seemed to be removed and on its ruins an edifice was constructed of a strictly mechanical conception; an immensely complicated play of physical and chemical forces in an immensely complicated substratum; the protoplasma.

The defeat of vitalism seemed to be complete.

But it seemed only so, and under the name of "Novitalism" the theory has been revived, that, although all living organisms are subject to the same physical and chemical laws as dead nature, there must be still other

forces working in the living organisms, which are unknown to us.

Surely the substratum of life is to us now, as ever before, a terra incognita.

No natural philosopher will deny that a person who falls from a height follows the laws of gravitation, or that the blood flows in its vessels according to the hydrodynamic laws, or that the phosphorus in the brain of a highly gifted man is not different from the phosphorus on a matchhead. But to make the logical salto mortale to claim that all the physiological processes in a living person are only a complicated play of physical, chemical and mechanical forces, and that the living man is nothing but a complicated automaton, this would be infinitely more than any living person could prove. The living organisms are doubtless subject to the laws of dead nature, but life itself remains one of the greatest mysteries to us.

Whether science will ever succeed to lift the veil that covers this secret, the far away future only can decide; but that much is certain, that our ending century has sought in vain to solve the problem of the origin of life.

REPORT OF SURGICAL CASES.

By Edgar Patton McCollum, M. D., Greensboro.
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In presenting this paper, with a report of a few cases, I make no attempt at anything new in the way of handling these cases, neither do I expect to startle you with any wonderful recoveries, or even any very remarkable conditions.

We are here mostly to listen to those who have had larger experience, and with the hope that we may become considerably benefitted by a free discussion upon all subjects.

The first cases I have to report are fractures of the skull. These are very common injuries, and we as physicians, should acquaint ourselves with the best methods of attending to these injuries.

Case No. 1. On the evening of August 7th, 1897, I received a message to make a journey of seven miles to see a boy, who had been kicked by a mule. Upon arrival at the house, I was shown into the room where I found a negro boy, twelve years of age, lying on the floor, his head resting in the lap of one of his companions from whom I learned the following: J. O. with several other boys, were chasing a mule to catch her. The mule dodged them, ran by and landed her foot on the boy's head. He was carried to his home unconscious. Upon examination of the still unconscious boy, the index finger passed into an apperture in the skull, it was quite evident that we had a serious injury to con-

tend with. In the mean time I carried my friend, Dr. M., with me, and we proceeded to operate. The head was shaven and the usual antiseptics precautions, such as scrubbing with soap and brush and then irrigating with a sublimate solution of 1 to 3000. Upon further examination, we found a punctured fracture of the right parietal in its most prominent portion. A crucial incision, about six inches long, was made through the scalp, and the loosened spiculæ of bone about the edges of the aperture removed without difficulty. It was evident, from the size of the aperture, which was about two inches by one and one-half inches in diameter, and the amount of bone removed, that the largest piece was imbedded in the brain substance. A dressing forceps was passed into the brain matter a depth of two inches and a piece of bone, which measured one inch and a half by three-fourths of an inch, removed. With the withdrawal of this, there was an escape of a considerable amount of brain matter, estimated at about two tablespoonsfull. Hemorrhage was not very great. The cavity was irrigated with sterilized water. The ragged edges of the periostium snipped off, as was also the dura and the sharp edges of bone cut away; wound closed first by uniting dura, as well as we could; with fine catgut, a small drainage tube was inserted, edges of scalp brought together by silk ligatures, antiseptic dressing applied. Patient was put to bed with the wound upward. I remained with him. He recovered from the anæsthetic, which was chloform, very quickly, was perfectly rational, answering questions readily, but with paralysis of the left forearm. The following day the drainage tube was removed and the patient made a rapid recovery, being out ten days from receipt of injury. Paralysis entirely disappeared two months afterwards. He is now a good field hand, and is apparently well.

CASE No. 2. That of a boy 10 years old, kicked by a horse, was a compound comminuted fracture of the superciliary ridge with a part of the orbital portion of the temporal bone with depression. The patient was brought to my office. I immediately examined him and diagnosed it as a fracture of the skull. After preparing him as best I could, he was chloroformed. I lengthened a lacerated wound over the left eye brow, to extend from the nasal eminence to the external angular process of the temporal bone. A compound comminuted fracture through the superciliary ridge, with a part of the orbital portion of the temporal bone with depression, was found. All separated fragments of bone were removed. A lacerated wound of two inches long was found in the dura, through which a spicula of bone had penetrated the brain tissue. Removing this, the wound in the dura was closed with catgut ligatures; a small drainage tube of soft rubber was inserted. The wound was closed with silk. The boy soon rallied, and I discharged him on the fifteenth day. His temperature at no time reached 100. This boy was comatose when I saw him.

CASE No. 3. While in a quarrel was struck with a large stick and became comatose. Three hours after the accident, an examination revealed a clean cut scalp wound an inch an three quarters long along the line of the coronal suture, and two inches on a line with the saggital suture. The flap was partly turned back, and was bruised and torn. The parts were rendered aseptic, and further examination exposed a fracture at the anterior superior angle of the right parietal bone. Four fragments of bone were easily removed, leaving an opening that could be covered with a dollar; also a fissure of the external table one inch and a quarter long, extending backwards and downwards to the parietal eminence. The dura was injured. No hemorrhage. After a thor-

ough irrigation the wound was closed, catgut drainage inserted, and dry iodoform dressing applied. Twelve hours after injury, consciousness began to return. The fourth day patient sat up in bed for a while; the case progressed favorably and by the twentieth day the wound entirely healed. The boy went to work five weeks from date of injury, perfectly well.

CASE No. 4. That of a negro woman 24 years of age; was called one night to see her five miles in the country. Upon my arrival at the house I found her suffering with violent pains in the abdomen. I gave one-fourth of a grain of morphine hypodermatically. Upon thorough examination I found an enlargement in the abdominal cavity, which diagnosed as a tumor. I then explained to the family her condition, and told them that an operation was the only hope for relief. I also explained to them that she might die under the operation. After some consideration they decided to have her operated on. She said she was determined to have relief, or die in the attempt. There was considerable pain caused by pressure upon the descending colon and bladder, the bladder emptying itself voluntarily. I began by putting her on tonics and making her take daily baths; for two days previous to the operation I ordered a bichloride bath. Having secured a well plastered room with plenty of light, Dr. L. assisted me in the operation. We sprayed the room from top to bottom with a strong solution of bichloride of mercury. The instruments and all having been sterilized, the patient was placed on the table, one-fourth of a grain of morphine was administered hypodermatically and an ounce of whisky taken. Chloroform was now administered; after getting her under its influence, an A. C. E. mixture was used to complete the operation. I made an incision in the median line of about six inches long, cutting through the

abdominal walls. Finding my incision not large enough, I cut it two inches longer. I then ran my hand in the abdominal cavity and around the tumor and succeeded in bringing it to the outside of the abdominal cavity. The adhesions were from the uterus and bladder; they were broken up from the tumor, a double ligature of strong silk applied to the pedicle and tied to prevent slipping off; it was cut off and the pedicle placed back in the abdominal cavity. It was an ovarian tumor of a fibroid type, weighing 8½ pounds. There being no fluid escaped into the abdominal cavity, we used sponges to absorb any possible fluid, cleaning the wound thoroughly and seeing that there was nothing left in abdominal cavity. It was now closed with silk sutures, and dressed with Iodoform, bichloride gauze, absorbent cotton, and a bandage applied. I remained with her for awhile; she rallied nicely from the anæsthetic; left morphine to keep her quiet if it became necessary. I saw her the next day, found her doing well, had rested well since the operation. I had to draw off urine for four days. Temperature at no time went above 99 degrees. On the fifth day I examined wound and found it doing nicely, and put on a fresh dressing. On the tenth day I examined wound, found it healed by first intention, removed the stitches, there was not a particle of suppuration, the dressing never even stuck to the wound. I discharged my patient on the 16th day. She was delighted, as she had made a complete recovery. She has had fine health ever since.

Case No. 5, was that of a Negro woman 50 years of age. Carcinoma of the breast. This disease seems to be on the increase. Joseph D. Bryant, of New York, demonstrated this fact before the New York Medical Association in 1895; statistics showing that in the United States the mortality from cancer in 1850 was nine for

one thousand living; in 1860 it was eleven and seven-tenths; in 1870 it was sixteen; in 1890 thirty-three and five-tenths, and of all the organs of the human body the most frequent situation of neoplasm is the female breast; and according to W. Roger Williams, of them ninety-five per cent. are malignant. This preponderance of malgnant tumors of the breast, coupled with the fact that benign growths at times take on a malignant form, proves at once the fallacy of the widespread belief among many physicians that as long as a tumor of the breast remains quiescent it is unwise to remove it. This idea undoubtedly originated from the dread of a surgical operation, with both patient and physician, prior to the days of antiseptic surgery. As at that time the prolonged process of healing with the then much talked of laudable pus not only caused much pain and suffering to the patient but undoubtedly the mortality was greater and relapses much more frequent than now. A positive diagnosis rests upon a microscopic examination by a pathologist; but with careful consideration of a case one scarcely need be mistaken in the diagnosis of carcinoma of the female breast. A large per centage of the cases occur between forty and fifty years of age. The progress of the disease is subject to very great changes in different individuals. Sooner or later the skin over the affected part becomes infiltrated, red, and advances to ulceration. The case which came under my observation was that of a woman about fifty years of age, colored. I first saw her at my office and upon examination I found a very much ulcerated breast to confront me. All around the nipple the ulceration was extensive, and there was considerable hemorrhage whenever anything came in contact with the ulceration. The axilary glands were also involved. She told me to do whatever I deemed best. I advised an operation. I put

her on a preparatory treatment before the time set for the operation. After having sterilized the instruments and rendered everything as aseptic as possible, the patient was placed upon the table and chloroform administered. Dr. L. assisted me in the operation. I made a parallel incision on each side of the nipple the entire way across the breast, then made a small cross incision and dissected the flaps until I could reach the bottom of the affected breast. Then I began to dissect out the breast clean down to the pectoral muscles and the pectoral fascia, after the removal of the breast, I then removed the axillary gland, after removing all the infected parts, the blood vessels being caught up and ligated, the capillary oozing checked by hot applications, the wound was now closed with silk sutures and dressed with iodoform gauze, absorbent cotton, and bandage applied. The patient rallied nicely from the chloroform; left one-fourth grain morphine to be given if necessary; she rested well and did not have to take any kind of an opiate. I saw her the next day, and she said she enjoyed her breakfast. I saw her every day; kept bowels open. On the sixth day removed dressing, found the wound doing nicely, and on the ninth day removed stitches, wound about entirely healed; about the twelfth day it was entirely well. I explained to her that it would probably return, and so it did. When I operated I only expected temporary relief. She lived eighteen months. I think the operation prolonged her life at least twelve months.

Case No. 6 is that of a boy about 21 years of age, shot in the foot with a pistol. Ball entering at about the center of what is known as the instep and ranging back toward the heel. I removed two small pieces of bone; I then dressed the foot in the usual antiseptic manner. I saw him twice a week after that; on the tenth day I

removed another piece of bone, thinking I had it all this time, but found out I was badly mistaken. Four months from the time he was shot I saw that an operation was necessary; chloroform was given, everything rendered as aseptic as I could. I proceeded to operate, with the assistance of my office boy. I amputated at the lower third, ligating all the blood vessels, the capilliary oozing was checked with hot water, the wound was now closed with silk sutures. Iodoform, bichloride gauze, absorbent cotton and bandage applied. It was only forty-five minutes from the time the anæsthetic was administered until the operation was completed. The wound healed by first intention and the boy was discharged on the fourteenth day. He gets about splendidly on his peg leg.

Case No. 7, is that of a man 45 years of age, with fistula in ano. Has suffered from it seven years. There were two fistulae, one on each side of the annus. I laid them wide open, irrigating them with a bichloride solution. I then dusted them with iodoform and packed them with bichloride gauze. I saw him once a day, dressed the wounds every other day. The man has made a complete recovery, and is as well today as he ever was.

Case No. 8, is that of a colored boy 16 years of age, bitten in the water while in swimming. This was ten years ago. Since that time the place where he was bitten has been a running sore. The limb had become very much shortened. He could not reach the ground with the limb, and the pain was so great he could not bear it any longer. The county authorities notified me to take him in charge and do what I deemed best. I advised an operation. With the assistance of Dr. R. I amputated the limb at the upper third, rendering everything as near aseptic as possible. The patient was chloroformed, and the operation begun. The blood ves-

sels were all ligated, the capilliary oozing checked with hot water, the wound was closed with silk sutures and dressed in the usual antiseptic manner. On examining the wound, I found it doing fairly well, redressed it on the third day and again on the tenth day; still doing well, the stitches were removed, and by the twentieth day the boy was discharged as well.

LYMPHOID TISSUES AND SOME INFECTIOUS DISEASES OF THE SAME.

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All bodies are composed of matter, and all matter is either organic or inorganic; inorganic bodies are made up of atoms and molecules of one or more chemic elements; organic bodies are composed of several chemic elements in the form of cells, or anatomic elements, together with rudimentary structures denominated tissues. The animal economy is composed of cells and the following primary tissue-elements: muscular, nervous, osseous, cartilaginous, and connective tissues.

Of connective tissue, there are the following varieties: Fibrous, White Fibrous, Yellow Elastic, Areolar, Mucoid, Basement-membrane and Lymphoid, or Adenoid.

I propose to speak briefly of the last named tissue, as found in the human body. Lymphoid or adenoid tissues consist of a delicate reticulum of connective tissue, enclosing granular or lymphoid cells or corpuscles; these granular or connective tissue cells line all lymph sinuses and follicles in the submucous membranes of hollow viscera, constituting an endothelial covering. The principal lymphoid tissue of the body is found in the lymph nodes or lymphatic glands; these nodes, from a physiologic and pathologic view point present material for interesting and important research.

Embryologically, the lymphatic glands are mesoblastic structures, therefore devoid of epithelial cells, hence they are not subject to primary cancer. They are not secreting organs, and, properly speaking, they are not glands, but are hemato-genetic or hemato-blastic structures, closely allied physiologically to the medullary tissue of bone and the spleen.

The structure of lymphatic glands is seemingly like other true glandular material, hence termed ADENOID, and, as it produces lymph and lymph corpuscles it is denominated LYMPHOID tissue.

The lymphatic glands and their connecting lymphatic vessels are scattered throughout the body, and are found wherever blood vessels are distributed, and are classed as belonging to the vascular system.

The origin, or peripheral beginning of the lymphatic vessels is in the connective tissue corpuscles in the intercellular spaces or meshes of all the tissues and organs of the body.

The terminations of the lymphatics are in the subclavian veins, on each side, at the junction of the internal jugular; on the left side, by the thoracic duct; on the right, by the right lymphatic duct.

The lymph nodes or glands are small oval bean-shaped bodies with a hilum through which blood vessels enter and leave the interior; the efferent lymphatics leave the gland at this spot, while the afferent lymphatics enter the node at its periphery or cortical portion, and branch into a dense plexus, then open into lymph sinuses, which form the medullary portion.

The lymph fluid is exposed to the adenoid corpuscles in the cortical portion, and, while passing through the medullary, it meets with a retiform membrane or reticulum, which acts as a sieve, arresting morphologic elements either normal or morbid, thus, preventing abnormal or septic material from entering the blood current.

Besides the lymph nodes, there are other organs of the body which contain more or less lymphoid tissue, the most important of these, being the faucial, pharyngeal and lingual tonsils, the spleen, thymus gland, solitary, and Peyer's glands of the small intestine.

When the function of an organ of known anatomic structure has been satisfactorily demonstrated, it is natural and logical to infer that any and all other organs of the same or similar structure, would have like or identical functions.

For instance, wherever in the animal economy, muscular tissue is found, it is correct to say it *contracts;* or if nerve tissue, that it *conducts* and *receives* impulses; and if glandular tissue, that it *secretes* or *excretes;* now, it has been demonstrated by physiologists, that the function of the lymph nodes or lymphatic glands is to modify the blood by augmentation of its white corpuscles. This being the function of lymphoid tissue or corpuscles in the lymphatic glands, hence the function of the adenoid corpuscles of the tonsils, spleen, thymus and Peyer's glands must be the same, viz, to manufacture white blood corpuscles.

Knowing that the lymphoid tissues of the body generate blood or certain parts thereof, it is plain that the blood would be the sufferer should disease affect the adenoid tissues.

This is made plain in both forms of leukemia,—the blood becoming impoverished, beings no doubt, secondary to disease of the lymphatic glands, the lymphatic tissues being primarily involved.

Lymphatic tissue is exceedingly susceptible to diseases of an infectious nature; the lymph node becomes enlarged by inflammatory changes, or from congestion, due to various toxins being lodged in them; permanent changes may take place in the lymph-nodes, producing chronic

enlargement or hyperplasia of tissue. Enlargement of the lymphatic glands may be due to, (1) Infection, (2) Sarcoma, (3) Carcinoma, (4) Lymphoma.

ACUTE affections of the lymph nodes are due to entrance of pyogenic microbes or pre-formed septic material,—toxins—into the lymphatic system; the most frequent being some form of streptococci or staphylococci, the former always causing violent inflammatory disturbances, the latter, not so great. The germs of scarlatina, measles, and diphtheria often cause acute enlargement of the cervical glands, but rarely lead to suppuration.

CHRONIC disease or enlargement of the lymph nodes is usually due to syphilitic virus or the microbes of tuberculosis, or to lymphatism.

SEPTIC inflammation of lymphoid tissue is always due to pyogenic microbes, or their toxins in the lymphatic circulation. This form of inflammation is seen in ordinary trauma of the surface of the body or mucous surfaces and rarely in any deeper tissues.

It is said that lymphoid tissue is more resistive to inflammation than other tissues, because of the phagocytic properties of such tissue, due, of course, to the adenoid corpuscles contained therein. The result of an inflammatory process in adenoid tissue depends on the amount and character of microbes and toxins in the tissues involved, as well as on the condition of the patient, and may be either resolution or destructive suppuration.

Lymphadenitis is always attended by more or less fever and local signs of inflammation, and is preceded by an inflammation of the lymphatics between the inflamed gland and the infection-atrium. The treatment of a simple or septic lymphadenitis is counter-irritation in the first stage, by means of iodine or guaiacol painted over the glands; hot applications and early incision and drainage, in the suppurating stage. The incision should

be small, and the abscess cavity syringed out with dioxide of hydrogen, followed by irrigation with plain sterilized water; rarely is extirpation of the glands necessary unless enormously enlarged, or chronically affected.

Tuberculosis of the lymph nodes is always a progressive disease, extending from gland to gland, is attended by regressive metamorphoses, coagulation necrosis and liquefaction of the cheesy product. The treatment of tubercular glands, when accessible, should be extirpation by clean dissection, no currette or spoon should be used.

Syphilis of the lymph nodes, when not treated, is manifested by enlargement of all the glands during the early part of generalized syphilis, usually during the first eighteen or twenty-four months of the disease; but, if treated, less time is required for their restoration. The enlargement of the lymph nodes during the early months of syphilis is due to a subacute inflammatory process and formation of new cells, called by older pathologists, hyperplasia. Later syphilitic implication of these glands causes death of cells, or gummatous deposits. It has been said that lymphoid tissue is the habitat of syphilis, and the amount of glandular enlargement is an index of the severity of the disease.

The treatment of syphilis by mercury for the first eighteen months, then by iodides, or the mixed treatment, is usually successful, but cases are often met where all specific medication is deleterious, and nothing but tonics and improved hygenic and dietetic conditions will benefit the patient. Mercurials and iodides are the only two reliable remedies in the specific treatment of this disease. These two drugs—iodine and mercury—act by producing fatty degeneration of the specific cells of syphilis, and subsequently cause their liquefaction and

elimination by all the emunctories. These drugs are relied upon to cause absorption of newly formed material in any organ or tissue of the body; they may be called the two great lymphatic stimulants, arsenic being more a cellular and nerve energizer, and subordinate to iodine and mercury in effect.

Lymphatism is a term now generally used by Americans, and applied to a condition of enlargement of the lymphatic glands during childhood, especially those glands about the neck, bronchus, and mesentery. This hyperplasia of lymphoid tissue is often seen in healthy, fat, robust children, and is not due to tuberculosis or syphilis, as was formerly believed, and termed scrofula, or struma by older writers. Tillsmans of Leipsic, Germany, still believes that scrofula and tuberculosis are two different conditions, and not identical; scrofula being a condition, or constitutional anomaly, by which infection with tubercular germs is favored; while tuberculosis is an active process or change in the tissues, caused by specific germs. Children, at birth, often have an excessive development of lymphoid tissue, particularly in the glands of the neck, in the tonsils, and rhinopharynx, hence heredity plays an important part in its production. Parents, when children, suffered from the same affections, and often every member of a large family of children is affected.

Rickets and lymphatism are often associated; this would lead you to conclude the latter was a nutritional disorder. During infancy, the glands most involved are the gastro-enteric and the bronchial; causing obstruction to the lacteal circulation, when the mesenteric nodes are involved, resulting in imperfect absorption and bad nutrition. When the bronchial glands are affected, lymphatic obstruction at the root of the lungs, as well as the retardation of the blood circulation, takes place,

causing pulmonary troubles, as chronic or interstitial pneumonitis, and bronchitis and asthmatic tendencies. During childhood, between four and fourteen years, the adenoid tissue of the rhino-pharynx becomes greatly involved, obstructing nasal breathing, causing deafness by occluding the *eustachian* tube and thus preventing vibration in the tympanic cavity.

General enlargement of the glands is best treated by iodine, arsenic, iron and cod liver oil. Adenoids should be removed by proper forceps and curette, the patient always being under a general anæsthetic.

Leukemia is a hyperplasia of the lymphatic tissues, as well as of the marrow of bones, and is characterized by a specific pathologic change in the blood, viz: an excess of white corpuscles.

Pseudo-leukemia is an affection of the lymphatic glands, especially those of the neck, the glands becoming enlarged and hard. This disease is called Hodgkin's disease, or lympho-sarcoma; progressive anæmia takes place, but not such blood changes as in leukemia proper. These affections point so strongly to an infectious origin, that there can be little doubt they are infectious diseases in which the undiscovered germ selects the lymphatic tissues as its field of action. The only treatment for these two affections is arsenic, both internally and hypodermically in the involved tissues.

Primary carcinoma of lymphoid tissue never occurs, because as said before, of the absence of the essential histologic elements, epithelial cells; secondary carcinoma, however, is a frequent occurrence, caused by extension of the disease along the lymphatic channels.

It was formerly thought that the thyroid gland and the supra-renal bodies were like the lymphatic glands in structure and function, but it has been recently shown that these organs contain no lymphoid tissue, hence they

are not associated in function with adenoid tissue. The function of the thyroid body is not thouroughly understood, but it is known that this body, in some way, regulates the metabolism of nutrition of the tissues generally; the effect of its complete extirpation, being a profound disturbance of nutrition, as seen in cachexia, struma-priva or operative myxœdema; while the function of the supra-renals is to regulate the action of the nervous system by inhibition. The nuclein or extract of these bodies has been used very recently to diminish or prevent surgical shock, being better than any other known agent for that purpose.

Lastly, I shall speak hurriedly of the lymphoid tissue of the small intestines, namely, Peyer's glands. These glands, as well as the solitary follicles, are particularly subject to tuberculosis and typhoid inflammation. Typhoid fever is claimed by some to be a fever due solely and only to inflammation of Peyer's glands. It is well known what great constitutional disturbances result from inflammation of external superficial lymph nodes, hence it is reasonable to infer that a more extensive and prolonged febrile disturbance would result from involvment of deeper and more vascular lymphatic glands or adenoid tissue, as found in the intestines. The microbe of typhoid fever has a selective affinity for this tissue, locating itself there, and causing subacute inflammatory changes or hyperplasia, followed either by resolution or necrosis and granulation, or by perforation of the intestines, all these processes requiring twenty-one days, or more, for their completion or termination.

The treatment of inflammation of Peyer's glands is rest to the tissues and bowels together with the administration of antiseptics. Rest to the bowels is best attained by giving liquid diet and keeping the body quiet in a recumbent position. Salophen and carbonate of

guaiacol, and mercury are the best intestinal antiseptics in the treatment of typhoid inflammation, or any other ulceration of intestinal adenoid tissue.

Tuberculosis of the mesenteric glands and Peyer's glands is termed Tabes mesenterica, and usually terminates fatally. This condition is often diagnosed enteric or typhoid fever, the differential diagnosis being very difficult even at autopsy and often not satisfactory until the microscope and Widal's agglutination test are applied.

GENERAL OBSERVATIONS ON SERUM-THERAPY.

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Co-incident with the development of bacteriology as a distinct branch of legitimate medicine methods for the prevention of disease became an absorbing question with all who were in touch with advanced medical thought. Experience had demonstrated that ordinarily one attack of an infectious disease was protective against future attacks, and that many individuals, through some inherent and unexplained influence, escaped such diseases despite frequent exposure. Immunity, natural and acquired, therefore became a subject of earnest investigation, and engaged the attention of observers throughout the world.

The first practical result of such investigations was obtained by Pasteur, who demonstrated the immunizing and curative virtues of inoculations with attenuated virus in anthrax and fowl cholera. So far reaching was the work of Pasteur from an economic standpoint that it attracted universal attention, and instigated greater effort on the part of workers everywhere. Thus was laid the foundation upon which rests the whole theory of serum-therapy as we know it today. Pasteur used a toxine modified by dilution and attenuation, inducing either a mild type of the disease, which was protective against subsequent attacks, or conferred absolute im-

munity. The studies of Roux indicated that the morbific influence in the infectious diseases was not due to the microbic agent, but to ferments which it evolved, and which he termed an enzyme, subsequently found to be a tox-albumin which is now termed a toxine. The correctness of this claim was confirmed by the passage through a porcelain filter of a pure culture of the microbe, which separated the latter. Inoculation with the filtrate of such virulent cultures produced the disease in question in a malignant form, provided the cultures were not too old or had not been modified by chemical means.

The principles underlying blood serum-therapy were fully established in 1892 through the painstaking and laborious researches of Behring Kitasato, Ehrlich and others, but were not fully developed in a practical form until 1894. Having ascertained that the blood serum of animals immune to an infectious disease conferred immunity to animals susceptible to the disease, their efforts were directed to the immunizing of human beings against an infectious disease by the use of naturally alien serums, or of serum rendered antitoxic by gradually increasing doses of the toxin of the pathogenic germ. During the years intervening from the development of the theory of serum-therapy until its practical application in 1894, Behring, Roux, Ehrlich and others were busily engaged in their efforts to make their method available for the treatment of disease in man. In 1894 about 400 cases of diphtheria had been treated with the serum produced by their methods in the Institute of Infectious Diseases in Berlin under the immediate supervision of Behring, Ehrlich, Wassermann, and Kossell.

The remarkable results obtained by Roux were not known until the publication of his paper read before the International Congress of Hygiene held in Buda-Pesth

in September, 1894. After this paper was widely read the method attracted almost universal attention.

Upon the announcement by Koch in 1891 of his tuberculin, notwithstanding such announcement was known to be premature, the profession hailed the remedy with almost childish delight as a cure for tuberculosis, and upon its failure to accomplish that for which it was intended, a spirit of incredulity arose as to the possible efficacy of any antitoxin that might be devised for an infectious disease. It was, therefore, perfectly in harmony with the skepticism which pervaded the profession at the time of the publication of Roux's paper, that his results, and the claims which he made for serum-therapy were receivod *cum grano salis*. Notwithstanding Pasteur's brilliant work, and that Bogola of Sienna had vaccinated patients suffering with diphtheria with diphtheritic virus with most excellent results, the profession hesitated lest the new treatment was a *fin de siecle* fad destined to the ignominious fate of tuberculin. However, the results obtained in the large hospitals of Europe with the serum treatment of diphtheria were so uniformly flattering, and the mortality rate so greatly at variance with what it had formerly been, that everywhere it was tested with the most gratifying results, and to-day the remedy is recognized as curative and immunizing except by those who are blinded by prejudice.

To Behring unquestionably belongs the credit of having discovered that the blood-serum of animals rendered immune by gradually increasing doses of toxin, contains a substance which neutralizes the toxic agent contained in virulent cultures of the Lœffler bacillus. This effect is pronounced when added to the filtered virulent cultures of the bacillus outside the body as well as when injected into animals. Thus was established the basic principles upon which rest our present conceptions of

serum-therapy, whether the disease is diphtheria, tuberculosis or tetanus.

At the same time that investigations were being made as to the curative and immunizing powers of serum rendered antitoxic by inoculation with diphtheria toxins, Behring and Kitasato were engaged in a work equally as important and interesting, the evolution of a curative and immunizing serum for tetanus. Kitasato had in 1889 identified Nicolær's earth bacillus as the specific pathogenic microbe of tetanus. Subsequently, Kitasato and Behring succeeded with the blood of a rabbit rendered immune against tetanus, in protecting mice against the disease, and also in curing them when they were already affected. With a disease hitherto so fatal as tetanus, and with such results already experimentally obtained a fruitful field of inquiry was opened up, especially if there existed even a remote possibility of success. This work, as with the anti-diphtheritic serum, seemed to secure better and quicker results, by selecting for inoculation experiments cultures of the germ treated with trichloride of iodine. By ascending from inoffensive cultures to those which were more active, immunity could be secured against very large doses of virulent cultures of tetanus toxins. The results which these observers obtained were in 1891 confirmed by Tizzoni and Cattani of the University of Bologna who, by experimentation, demonstrated their ability to confer a strong degree of immunity. In 1892 Brieger and Ehrlich immunized goats in a like manner. An important fact connected with this experimental work was that it required greatly larger quantities of the antitoxin to cure an animal after the disease had fully developed than it did to prevent the occurrence of the disease by using antitoxin as soon as infection was suspected. The blood serum from animals rendered immune according to the

methods pursued in these investigations conferred immunity to others more susceptible, as well as being destructive to the virulence of cultures outside the body. Tizzoni and Cattani were successful in separating from such blood by precipitation with alcohol, a solid albuminoid material, which apparently contained the protective principle of the serum.

Notwithstanding the failure which attended the use of tuberculin various modifications of this agent have, from time to time, been introduced, each claiming possession of special merit. Much work has been done in this line by Koch, Klebs, Paquin, Von Ruck and Maragliano. The serum is prepared from the blood of horses that have been immunized against attenuated cultures of the tubercle bacilli. Koch by a mechanical device succeeded in breaking the wax-like membrane of the tubercle bacillus, thereby obtaining the contained constituents. The resultant, when properly prepared constitutes his latest contribution to the therapy of tuberculosis—Tuberculin R. Klebs' modification of the old tuberculin, called tuberculocidin or antiphthisin, is simply the crude tuberculin deprived of its toxins and its reactionary powers. Maragliano of Genoa, has introduced a serum, the latest aspirant for professional favor. It claims to neutralize both with animals and men the principal toxins of tuberculosis.

Marmorek has succeeded in producing a serum antagonistic to streptococcic poisoning, and which has been latterly used in cases of erysipelas, septicæmia, or in cases of mixed infection, and in those diseases which manifest symptoms at variance with the known specific effects of the pathogenic microbe of the disease in question, which symptoms can be logically ascribed to streptococci.

Sewell in 1887 succeeded in immunizing pigeons against rattlesnake poison by the administration of grad-

ually increasing quantities of the venom, thereby foreshadowing the advent of a serum antagonistic to the venom of serpents. The demonstration by Fraser, after extended experiments, that animals immunized against one venom were rendered immune to other venoms was another step in its evolution. The verification at the Pasteur Institute in Paris of these claims and experiments led to the preparation and introduction of the anti-venomous serum.

Having now briefly outlined the history of the discovery and introduction of curative and immunizing serums there are certain questions involved in the subject necessary to its proper comprehension, hence we must inquire as to the method by which the toxin for immunizing animals is made, how immunity is secured, how blood-serum containing antitoxin produces its curative and immunizing effects, dosage and methods of administration, and finally how the results obtained with this agent compare with other methods of treatment.

Virulent cultures of the diphtheria bacillus are grown in alkaline bouillon to which is added trikresol in order to destroy the living micro-organisms which are subsequently removed by filtration through a porcelain filter. The filtrate thus secured is a poisonous compound produced by the germs—a toxin. This fluid is kept in the dark, in a well corked bottle at ordinary temperatures. 0.10 c. c. of the toxin, thus kept, will kill a guinea pig weighing 300 gms in 48 hours.

The extreme virulence of the toxin thus prepared precludes its being used on account of the probability of its inducing death, hence dilution is necessary. For this purpose Roux uses iodine. Previous to its injection it is diluted with ¼ its volume of Gram's solution. The amount of this diluted solution used at first depends on the size of the animal, the effort being that the dosage

be not lethal. The initial dose for a horse is 15 minims. This dose is repeated in gradually increasing amounts, at intervals of about one week, immunity being secured in three months. In these injections of increasing dosage the diluent is gradually lessened until the final injection is of the pure toxin. Should the animal evidence diminution in weight or malaise the injections are suspended. The susceptibility of different animals varies. While dogs give good serum, experience demonstrates that the horse is the best animal for many reasons, especially in view of the fact that he is not susceptible to the poison. Even larger doses than those mentioned rarely cause fever or local œdema. Besides it has been found that the horse furnishes a larger amount of serum containing antitoxin, which when injected into human beings produces no irritation, and is harmless.

The general principles which obtain in the preparation of anti-diphtheretic serum apply in the preparation of all curative and immunizing serums. In fact the method is an extension of Pasteur's inoculations with attenuated virus—the antitoxin being the curative and immunizing agent which such attenuated virus creates.

The method by which alien serums immunized by inoculations with specific toxins exercises curative and immunizing powers in human beings is still undecided. Behring maintains that its action is chemical—that the antitoxin neutralizes the toxin as an alkali does an acid. He "believes that the antitoxic inoculations contribute to the production of defensive proteids, and that these defensive proteids, remaining in the blood serum, destroy the poisonous products resulting from the diphtheria bacillus." Büchner and Roux on the other hand contend that its action is a vital one and the immunity and cure are brought about through an increased cell re-

sistance due to the antitoxin, which stimulates the protoplasm of the body cells. This is in accord with Büchner's doctrine of the alexines. Metchnikoff, in harmony with the doctrine of phagocytosis so ably and ingeniously elaborated by him, is in accord with Büchner, although he ascribes the immunity and cure to the resistent action of the leucocytes. Behring and Ransom claim as the result of experimentation that when antitoxin is added to the toxin in sufficient amount exactly to neutralize it, no symptoms are produced in animals inoculated with the mixture, but that in all cases where the toxin was in excess the animal died. Recent investigations instituted by Martin and Cherry seem to confirm the correctness of Behring's contention. However the subject is still *sub-judice*, although the consensus of professional opinion seems to be in accord with Büchner and Roux.

The dosage of the various antitoxic serums depends upon the quantity of toxins whose effects are to be antagonized, therefore no arbitrary rule can be uniformly applied in their administration. The potency of a serum is measured in antitoxic units. This is established by ascertaining the amount of antitoxic serum required to protect a guinea pig against ten times the least certainly fatal dose of toxin. Ten times this amount constitutes one antitoxic unit. With the antidiphtheritic serum the dose should be 5.c.c. equal to 80 drops of from 1000–1500 antitoxic units to children under two years of age, while older children should receive the same dosage of a serum of higher potency. In laryngeal cases still higher potency should be used while for immunizing purposes a serum of greatly lower potency will fulfill every purpose. The serum is given hypodermatically, the intra-scapular region being generally used for the purpose.

The results that have been obtained in the use of anti-diphtheritic serum have been gratifying and have estab-

lished beyond all controversy its practical value. Reliable statistics in abundance demonstrate both its curative and immunizing value, and no amount of skepticism or *a priori* reasoning can extenuate the negligence of a physician who in the presence of so fatal a disease as diphtheria fails to utilize it. During its evolutionary period, when its use was experimental and tentative, with the failure which attended the introduction of tuberculin in view, doubt was justifiable, but now the curative virtues of the agent being fully demonstrated, skepticism carried to extremes implies the useless sacrifice of human life. As indicating to some extent the invincible logic of statistical figures I submit the following:

Virchow in December, 1894, reported to the Berlin Medical Society the results obtained in the Kaiser and Kaiserin Hospital, in diphtheria cases treated with and without serum. In June and July there were treated with serum 63 cases, of which 55 recovered, 8 died. Suddenly the supply of horse serum was exhausted, as the horses from which the serum was taken died. The old methods of treatment were then resorted to, resulting as follows: 109 cases, 54 recovered and 55 died. This extreme mortality induced the hospital authorities to return to the use of the serum with an immediate reversal of results. In the next six weeks there were treated with the serum 81 cases, of which 69 recovered and 12 died. The totals of the trial which the serum treatment underwent in this hospital should convince any one of the great practical value of the remedy, for of 533 cases treated—303 with serum—230 without—the former had a death rate of 11.2 per cent., the latter 47.8 per cent. As Virchow said at the time, all theory must yield to the brute force of such figures.

The results of the collective investigation made by the American Pediatric Society are too familiar to justify reiteration now. However, the supplementary report of this society, dealing entirely with laryngeal cases, furnishes an unanswerable argument in advocacy of this form of treatment, and I feel that I am justified in giving a resumé of that important contribution to the literature of serum-therapy. Of 1,704 antitoxin treated cases of laryngeal diphtheria there were 360 deaths, mortality 21.12 per cent. Among 1,036 cases not requiring operative interference there were 178 deaths : mortality 17.18 per cent. Under the methods of treatment in use prior to the introduction of anti-toxin it was estimated that only about 10 per cent.of the cases of laryngeal diphtheria recovered without operation, while the report shows that in 1,036 cases 82.82 per cent. did not require operation. Of the 668 cases requiring operation the death rate was only 24.24 per cent., which is a reversal of the figures formerly representative of the recoveries—27 per cent. being the recoveries formerly ascribed to cases submitted to operation, while the death rate is now less than the recovery rate under methods of treatment other than antitoxin.

The minimum mortality in Berlin from diphtheria was in 1896 and 1897—589 and 546, whereas from 1886 to 1895 the mortality varied from 1,006 to 1,662. The rate per 10,000 living in 1885 was 12.4 per cent., in 1893 it was 13, and in 1894 it was 10.1, which suddenly fell upon the introduction of antitoxin in 1895 to 5.3, in 1896 to 4.3, and in 1897 to 3.5.

Equally as remarkable were the results in Paris. In that city from 1877 to 1895 the mortality from diphtheria varied from 1,009 to 2,393, while in 1896 and 1897, after antitoxin had come into general use, it was respectively 444 and 300. The death rate per thousand living

was 6.7 in 1893, it was 5.1 in 1894, which suddenly fell in 1895 upon the introduction in the Paris hospitals of Roux's serum to 1.8, 1896 1.8 and in 1897 to the astonishingly low rate of 1.2.

The second report of the Metropolitan Asylum Board detailing the results in London with the antitoxin treatment is also favorable. Of 2,764 cases treated during 1895 the mortality was 25.9 per cent. The total mortality of cases treated in 1896—including those not treated with antitoxic serum—was 20.8 as compared with a mortality of 29.6 per cent. in all cases treated in 1894, before the serum was used. Patients under 5 years of age showed a mortality respectively of 47.5 per cent. in 1894 and 30.2 per cent. in 1896, a saving of nearly 17 lives per 100. Nearly 60 per cent. of the tracheotomatized children recovered in 1896, while in 1894 the mortality was more than doubled. This report further emphasizes the importance of the early use of the antitoxin, for the death rate rises from 5.2 per cent. in those who came under treatment on the first day of the disease to 31.7 per cent in those admitted on the 5th day and after. The records of the University College cases are even more instructive. Comparing the three antitoxin years with the preceding non-antitoxin years the results were as follows:

The per centage of deaths in the four non-antitoxin years was in laryngeal cases 70, 68, 78, 47, pharyngeal cases 18.7, 14.4, 10.9, 30; total per centages 43.5, 33.3, 37, 39. The figures in the three antitoxin years successively were in laryngeal cases 33.3, 40, 23.5; pharyngeal cases 24.4, 10, 13; total per centages 28, 17.7, 17.

The record of antitoxin treatment of diphtheria in Chicago, promulgated by the Health Board of that city is interesting and instructive, and is convincing testimony as to the value of that method of treatment. Of

418 cases of diphtheria treated with antitoxin during the months of November and December, 1898, and January and Febuary, 1899, the death rate was only 4.78 per cent. There were no deaths in 129 cases treated with antitoxin in the first and second days of the disease, and there were only three among 114 on the third day, a mortality per centage of 1.23 in a total of 243 cases treated in the first three days from the outset. 38 or 9 per cent of the cases required intubation with 30 recoveries and eight deaths, a mortality per centage of 21, or less than two-thirds of the average death rate of all cases before the introduction of the antitoxin treatment. Further argument relative to the curative value of antitoxin would be an act of supererogation, since the figures already given are ample refutation of adverse criticism based on theoretic considerations or prejudice.

While the serum has exercised such a potent influence in the reduction of the mortality rate of diphtheria, wherever it has been tried, its immunizing virtues rest on a basis equally as substantial. This immunity, however, is not permanent, most observers contending that wherever exposure to diphtheria exists immunizing doses of the serum should be given at intervals of a month so long as exposure continues.

The treatment of tetanus with anti-toxic serum is still tentative. Its immunizing powers are unquestionable, but its curative effect after the disease has once thoroughly developed is still a matter of doubt, and further experimentation is necessary before its true status as a therapeutic agent can be determined. The statistics which have been from time to time, published in support of its curative powers are open to the objection that the cases have not been sufficiently detailed to enable an unprejudiced judgment to be formed from them. Large numbers of cases have been published in which recovery occurred after treatment with the anti-tetanic serum,

and upon first glance they indicated a much lower mortality rate than under former methods of treatment. But many of the cases that recovered were sub-acute, running a slow course, and similar to those which recovered before the introduction of the antitoxin treatment. Further trials of the remedy are necessary before its value can be determined, although the evidence already accumulated makes it worthy of a fair and full trial in the presence of a disease so fatal as tetanus.

Recently Roux and Borrel, as the result of laboratory experiments, have advocated the intracerebral injection of antitoxin in the treatment of tetanus. Their experiments with tetanus toxin led these observers to believe that the toxin of tetanus is fixed in the nerve-cells, that the antitoxin remains in the blood, and that a curative serum injected into the blood is powerless to neutralize the poison which has already entered the nerve-cells, because it cannot be reached. On June 18th, 1898, they report their first case of tetanus treated by this method. The patient, a lad of 16 years, suffering with tetanus consequent upon a traumatism of the fingers, was operated upon three days after the beginning of the disease. The skull was trephined on the right side and through the opening thereby made, Roux injected drop by drop between one and one-half and two cubic centimeters of anti-tetanic serum, concentrated one-half. The result was recovery. Rambaud has collected from foreign literature twelve cases treated by this method, eight of whom died. Of the four successful cases, the incubation in one was fourteen days, in two it was unknown, there being no wound; in one it was twelve days. Apparently none of these were of the fulminant type. Three cases have been reported as having been treated by this method in this country. The first one developed tetanus after laparotomy, the incubation being ten days;

the patient recovered from tetanus but died about three weeks after the injection of acute nephritis. The second case had an incubation period of twelve days and was in the seventh day of a mild tetanus when the injection was made. The third case had an incubation of seven days; he died twelve hours after injection. The results thus far obtaiued with this method of treatment have not been sufficiently encouraging to justify its use except in hospitals in an experimental way. Unless better results with it occur in the future it is likely to remain only a futile effort to apply the theoretic conclusions incident to experimental work in the laboratory to the treatment of disease.

The various serums that have been from time to time introduced for the cure of tuberculosis have been disappointing. While they do not induce the serious reaction which frequently followed the use of tuberculin their value as curative agents has not been established. The results obtained by Heweston in his studies on experimental tuberculosis "seem to justify one in concluding that anti-tubercle serum has no influence in prolonging the life of tubercular guinea pigs." Trudeau and Baldwin confess their disappointment at the outcome of their experiments with anti-tubercle serum in experimental tuberculosis, "None of the serums appeared to prevent local or general reaction from small doses of tuberculin; nor to influence the temperature of tuberculous animals." Maragliano reports extremely favorable results with his serum, but a more extended trial of it is necessary before we can make any estimate as to its value. Fisch has prepared an anti-tubercular serum which he terms anti-phthisic T. R. Serum in the preparation of which he utilized a mixture of the old tuberculin and Kochs tuberculin T. R. for immunizing purposes. His experiments in guinea pigs inoculated with tubercle

bacilli and their toxins apparently justify his claim that his serum exercises an antagonistic influence against experimental tuberculosis, but before its value can be established in the treatment of human tuberculosis more extended observations are necessary. After careful study of the statistics upon the serum treatment of tuberculosis an unprejudiced mind is forced to the conclusion that the problem has not been solved, and that the whole matter is as yet in the experimental stage. But in view of the excellent results which have followed the discovery and introduction of anti-diphtheritic serum we have just grounds for believing that a serum will yet be devised which will nullify the baneful influence of that enemy to mankind—the bacillus tuberculosis.

The anti-streptococcic serum of Marmorek, reported first in the Annales de l'institut Pasteur, July, '95, has not established its claim to great value. Reynolds believes that "if used freely it seems to be a dangerous remedy." Thomson says, "there is still room for belief that this treatment is not entirely free from danger." Watson Cheyne expresses "great doubt of its value as a curative agent." Morris says, "So far its usefulness has not been demonstrated and it is not free from danger." Recently as the result of studies upon streptococcic infection, Fisch has devised a serum antagonistic to streptococcic invasion which gives promise of being a valuable addition to our therapeutic resources. From reports of cases of septicæmia which have been treated with this serum I am inclined to believe that it is of great value in cases of pure streptococcic invasion. The dose of this serum is 10 c. c. John T. Miliken & Co. of St. Louis, are the manufacturers, and I suggest its trial in every case where reason exists for suspecting streptococcic poisoning.

In cases of puerperal septicæmia this can be determined by microscopic examination of the lochia.

Experience in the use of other serums which have been introduced for the cure of disease is yet too limited to entitle them to consideration as therapeutic agents. From what has already been done in this line of work we have good reason to believe that in the future great advances will be made, and that in due course of time the infectious diseases will be made to yield to the curative powers of alien serums made antitoxic by toxin inoculation.

From what has been said I feel justified in laying down the following propositions:

1.—Bacteriological studies and experimental work in the laboratory, by competent observers, demonstrates beyond controversy the fact that alien serums immunized against the infectious diseases, are harmless when introduced into the human body, and their potentiality as remedial agents is full of promise.

2.—Serum rendered antitoxic against diphtheria has, by yielding good results in the reduction of the mortality rate of that disease, wherever it has been used, established its curative value.

3.—In the treatment of diphtheria with antitoxic serum the best results are obtained in those cases where it is used in the first three days of the disease, although no patient with diphtheria should be denied its possible benefits at any stage of the disease.

4.—Neglect in the presence of diphtheria to utilize the anti-diphtheritic serum is censurable since its curative effects are unquestionable.

5.—Alien serums immunized against the other infectious diseases are still in the experimental stage and

further investigation is necessary before their valne can be established.

6.—The rapid advances which have occurred in this line of work indicate that the future promises a serum antagonistic to the microbic agents causative of each of the infectious diseases.

A THERAPEUTIC MEASURE IN THE TREATMENT OF TUBERCULOSIS BASED ON PHYSIOLOGICAL CONSIDERATIONS.

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Serotherapy arrogating to itself the designation of physiologic medicine has a very doubtful claim to that distinction. The introduction into the circulation of toxins, themselves the products of morbid action, may under certain conditions counteract other toxins there. Under other conditions, they may excite a cellular response, resulting in the generation of protective substances by the cells. The use of these agents may be legitimate—it may even become scientific—but it seems a questionable use of language to call methods phsiologic which depend for their results upon pathologic processes. Even if we grant the doubtful claim of these agents and methods to a place in physiologic medicine, still the fact remains that the field is much broader than "serum."

The ultimate measure of vital action, as well as the ultimate source of vital force or resistance of the body as a whole and of its individual cells is found in oxidation. Oxidation furnishes the energy with which the organism does its work, cellular and somatic, developing the potential energy of the nutritive increment into final action.

The ultimate factors, then, upon which depends the generation of vital force are nutrition and oxidation.

Under normal conditions these two processes balance or complement each other. This correlation may, however, be destroyed in various ways. Overfeeding may force through the channels of primary assimilation nutritive material in excess of the physiologic demand or the normal capacity of the organism to oxidize. In this way excessive fat accumulation or gouty and rheumatic states may result. Through lack of physical exercise, the conditions for sufficient oxidation may fail, resulting in the accumulation in the system of suboxidation products.

Various special defects of nutrition may interfere with the capacity of the organism to take in and appropriate oxygen. Living in a poor or vitiated atmosphere lowers the physiologic oxidations by lowering the oxidizing capacity of the air itself. In whatever way it may come about, lowered or defective oxidation lowers the defensive capacity of the organism, increasing its vulnerability or liability to germ invasion. It does this by lessening the cell vitality or resistance. This increased vulnerability may be general, affecting all the organs and structures of the body. It is more apt to be greatest in particular organs through some inherent predisposition. When this defensive capacity falls below the point of successful resistance, the germ profits by his opportunity to occupy for his species a new nook in the economy of nature. He is able to do this because the low cell vitality and the presence of suboxidation products make for him favorable culture conditions.

Oxygen is not only the physiologic excitor of nerve sensibility and muscular contraction, thus actually supporting life, but is also the active agent in preparing for elimination the products of waste, serving as the scavenger of the system. On account of its pre-eminent physiologic importance, the conditions of its introduc-

tion and action in the human system demand a more extended consideration.

We would note first, as of fundamental importance, the proper maintenance of the nutritive increment. Through this means "the oil of the lamp of life" is furnished, supplying the materials for this organic combustion. Lower nutrition and the oxygen increment is lessened as a simple physical adjustment and the vital dynamic output proportionately diminished.

The blood and tissues are alkaline or electro-positive and upon this fact depends their capacity to appropriate the electro-negative oxygen. Lessening the alkalinity impairs not only the capacity of the red blood cells to take up oxygen in the lungs and distribute it to the tissues, but also the capacity of the tissue cells to ap-appropriate it in effecting their own metabolism. It lowers also the solvent power of the blood for the products of oxidation.

The inherent capacity of the red blood cells to supply oxygen to the tissues may be impaired by other conditions than subalkalinity. Their own nutritive needs may be imperfectly supplied on account of general malnutrition.

Nitrogen appears to play a peculiar and important role in the hemoglobin molecules and a due proportion of this element is necessary to the normal physiologic activity. Negative and unstable, yet possessing numerous bonds of affinity, nitrogen seems to make possible the intra-molecular motions and adjustments of hemoglobin in the discharge of its functions by serving as a pivot or center of motion for its atomic constituents. The essential constituents of hemoglobin, however, those whose fundamental properties constitute the basis for its function, are iron and manganese. These may be deficient in quantity, constituting the conditions known as

anemia or chlorosis, with diminished capacity to supply oxygen to the tissues. As an immediate predisposing cause of infective diseases in general, this condition probably takes precedence of all others. The connection of chlorosis with the development of tuberculosis is too well known to demand special comment. As a condition establishing a favorable soil for tuberculous infection, it is the most important of all predisposing factors.

The state of the respired air itself also affects the amount of oxygen which the blood is able to take up in the lungs. This condition is summed up in three principal factors,—density, humidity and electric tension. Of course, contamination by excess of carbon dioxide or other gases may, under some circumstances, become factors.

Other things being equal, density increases the amount of oxygen which the respired air is able to give to the blood simply because increase of density increases the absolute amount of oxygen in given volumes of air. Under natural conditions, the greatest atmospheric density is found at the lowest levels, and other things being equal the oxygen increment would be greatest at the lowest levels. Other factors however are not, and cannot be equal. At lowest levels there is ordinarily high atmospheric humidity and always low electric tension. Where high atmospheric humidity does exist, the low electric tension is in a measure, though not wholly, dependent upon it. Since water is a good conductor of electricity, moisture in the atmosphere tends to diffuse and destroy electric tensions. One who has had experience with a static machine and has tried to charge it in a damp atmosphere without first drying out the moisture, will not forget this fact. At low levels, even if the air is dry, its electric tension is relatively much lower

than in higher regions, especially among mountain peaks. These projections of the earth's surface appear to act as points concentrating the earth's electricity, these charged points charging the air flowing over them. Whether or not this be the true explanation of the presence of ozone in mountain air, it appears to be accepted as a fact that the ozone is there and that the mountain air, as compared with the air of low levels, has increased activity, notwithstanding that in equal volumes the absolute amount of oxygen is less.

This brings us to a consideration of the nature of ozone. As stated in works on chemistry, ozone is condensed oxygen, having the empiric formula O3. It may be produced by passing oxygen through a box highly charged with electricity, three volumes of oxygen shrinking to form two of ozone. The electric force appears to dissociate the atoms of O2 in one volume of the oxygen, the liberated atoms each linking itself to a molecule of the remaining two volumes of O2. By an application of Avogadro's law, we know that the number of molecules has diminished by one-third. At the same time, we know from its increased chemical activity, as compared with ordinary oxygen, that its molecular structure is an unstable one, leaving unsatisfied bonds of affinity. It is to this molecular instability that its increased activity is due, since the molecule falls to pieces the more readily under the influence of disturbing affinities, developing the nascent condition precedent to all chemical unions. Indeed, the essential fact in this ozonic conversion of oxygen is the dissociation of atoms, the development of the atomic, nascent, or polarized condition. It is this condition which represents the energy used in parting the atoms of O2. As thus posited, this energy becomes either chemic affinity or electric force, as circumstances may determine, as the two

modes of force here become identical. Part of this high atomic tension is lost in undergoing this triatomic grouping which occurs where only other oxygen bonds are available. Given the presence of oxidizable material and the whole of this exalted tension may be expended directly in producing chemic effects. It is, in fact, identical with the nascent condition immediately preceding chemical unions and immediately following chemical dissolutions.

Simple altitude, without compensating conditions, could only be a disadvantage to persons suffering from impaired lung function on account of diminished atmospheric pressure and consequent rarefaction of the air. Where the function of a portion of the lungs is impaired or lost from tubercular infiltration, there is a tendency to compensatory dilatation of the air cells of the unaffected portions. Much diminished atmospheric pressure, either natural or produced by artificial contrivances, may carry this emphysema much beyond the point where any conservatory advantage accrues, increasing the embarrassment of respiration by interfering with the proper renewal of air in the lungs. Besides this effect, very high altitudes rapidly work the ruin of cases which have hemmorrhagic tendencies or have weak hearts.

Moderate altitude is for the great majority of cases most beneficial, and not then from diminished atmospheric pressure, but from co-existing compensating conditions. These conditions are diminished humidity, diminished miasmatic influences, diminished heat in the summer season and *increased electric tension in the air*. This last condition pertains especially to the oxygen of the air. Nitrogen being comparatively indifferent is affected but little by ordinary variations in the electric condition of the atmosphere.

I wish to submit the proposition here that electric excitation antagonizes chemic union between atoms similarly excited and favors it between atoms oppositely excited. When chemic dissolutions occur electric energy is absorbed and posited in the nascent atoms. It here becomes identical with chemic affinity and is still a form of vibrant energy. As affecting oxygen, I would define exalted electric tension to be a condition of strained relations between the atoms of the oxygen molecule. It reaches its highest expression in a rupture of relations and the development of atomic oxygen. This condition is at the same time one of the highest electric tension and one of the most accentuated chemic affinity. It is theoretically conceivable that this extreme tension could be maintained with doubling instead of shrinkage of the volume of oxygen. In the presence of oxidizable material this tension immediately expends itself in chemic action, otherwise the atoms fall into the unstable triatomic grouping known as ozone. A further diffusion of tension allows of the ordinary diatomic arrangement.

This electric strain increases the chemical activity of oxygen by lessening the cohesion of its atoms, causing them to part company the more readily to enter into new combinations under the influence of new attractions. This then is the principal condition which more than compensates for diminished density in mountain air, unless, indeed, the elevation be so great as to radically disturb the mechanical conditions to which the circulation is adjusted. At moderate elevations, three or four thousand feet, with ordinary exercise, oxidations are carried on more perfectly than in the denser air of low levels. The tonic effect of mountain air consists chiefly in this increased chemical activity of its oxygen, stimulating nerve and cell, increasing metabolism, and hence the nutritive demand; promoting appetite and digestion and ridding the system promptly of the products of waste.

The processes of nutrition and oxidation being fundamentally related to the development of vital force or resistance, methods of treatment designed to stimulate the one and promote the other can certainly lay claim to a physiologic aim. If they accomplish this result, augmenting cell resistance and reparative power, it must be admitted that they act in line with physiologic forces.

The fundamental aim in the method which it is the object of this paper to set forth is to increase the oxidations, at the same time utilizing the tonic effect of static electricity, thus stimulating metabolism, increasing the demand and the capacity for increased nutritive increment and building up the resisting or defensive powers of the organism.

A proximate object of the treatment is to facilitate the removal of the products of waste, the sewage of the system. As is well known in conditions of suboxidation, the products especially of nitrogenous waste, through lack of solubility and diffusibility from incomplete oxidation, tend to be precipitated and retained in the system, acting sometimes as irritants, always as disturbers of normal cell activity and resistance. To remove or prevent the accumulation in the system of the products of suboxidation from impaired lung function no measure could have a stronger rational indication than the use of oxygen itself under conditions which secure its rapid appropriation.

The static machine used is an eight plate influence machine fitted with a Wimshurst charger or excitor, to be used when necessary, as is sometimes the case in damp weather. The patient is placed upon an insulated stool connected with the positive discharge rod of the machine. The negative terminal is formed by a spray electrode having some forty-five brass points mounted upon a stand, but insulated from it by a hard rubber handle. This

electrode is adjusted so that the cluster of points is about two inches from the patient's mouth and nose. When the machine is started a strong electric wind is generated by the discharge from the points. This electric air is rich in ozone which is quite apparent from its odor, and is also easily shown by chemical tests. The ozone present is due to raising the electric tension of the oxygen to the point of dissociating the atoms of some of its molecules. In this way the oxygen, already electro-negative, is rendered more intensely so and its activity thereby exalted. At the same time, the patient, forming as he does the positive electrode, is positively charged, thus exalting the affinity of his fluids and tissues for the electro-negative oxygen. The patient is simply required to breathe and we have the conditions for rapid and effective oxidation.

If we wish the stimulant and antiseptic action of this ozonized air in disease of the nasal space or accessory sinuses the inhalation, of course, should be through the nose. Taken for constitutional effect or for local action in the lungs or bronchial tubes, it makes no particular difference whether it be through the mouth or nose.

The frequency and duration of the inhalations are matters to be determined by the conditions present in individual instances. The quantity of ozone developed by the process varies somewhat with atmospheric conditions. Fortunately, most ozone is developed in damp, murky weather, when it is most needed. In fine weather, it is much easier to get up tension in the machine and to get a more violent disruptive discharge, but the ozonizing action is less. The principle involved is analogous to the difference of coercive force necessary to magnetize iron bars of different degrees of hardness. Soft iron is readily magnetized while hardened steel requires a greater coercive force. In soft iron the condi-

tion soon passes away while in hardened steel it is more persistent. In a damp atmosphere this polarized oxygen is developed readily in comparative abundance by the static discharge. True, dampness tends to diffuse and destroy it as it does any kind of electric tension. However, produced directly in front of the patient's face, in fact, projected against it, it has ample time to get into his lungs before it loses its polarity and increased activity. The fact that there is more ozone normally present in the atmosphere in fine weather is evidence merely that it is more persistent than in damp weather. Those of you who have rheumatic tendencies can doubtless testify that damp weather lowers the internal oxidations favoring the production in the system of suboxidation products. Pardon the digression. The duration of the inhalations may vary in different cases from ten minutes to one-half hour daily. I began with ten minutes but now give it perhaps fifteen minutes on an average. I am quite sure that it may be given with advantage for a half hour daily in some cases.

What have we a right to expect from this treatment? Oxygen, as you know, is nature's great depurative agent both in nature at large and in the animal economy as well. Under the more active form in which it is furnished by this process we certainly have the right to claim that it facilitates the removal of the products of waste as well as the noxious materials resulting from impaired function and diseased processes in the lung. Ozone destroys all known germs. The claim is not here set forth that it will penetrate deeply into the tubercular masses and destroy all the bacilli, but it is a fair claim that it will destroy exposed bacilli and do much by direct action to inhibit their development. It will do much to destroy devitalized masses forestalling to a degree the development and absorption of toxins.

It is, however, upon the property which this high tension oxygen has of stimulating metabolism, thus promoting nutrition and cellular vigor and resistance, that our highest hopes are based. The cells in this way are made more self-protective and the process is certainly more physiologic than any theoretic protection afforded by the introduction of toxins into the circulation.

No fact is better attested than that spontaneous recovery from phthisis sometimes takes place. This can only occur through the vital resistance of the organism itself, manifested either as a local cell resistance directly exerted on the invading microbes, or as a capacity to generate antitoxins neutralizing the toxic products of germ activity and inhibiting the development of the germs themselves. At any rate, the recovery is due to the reactive vigor of the cell, and this in turn, is the product of nutrition and oxidation.

One of the first effects of the treatment by electric air inhalations is usually an increase of appetite and weight. The increased oxidation, besides its other effects, stimulates the metabolic processes, creating the demand for, and the capacity to appropriate, increased nutritive material, thus building up the vigor of the cell and its capacity to protect itself.

Attention to dietary is necessary to insure a due amount and proportion of the different elements necessary for the nutrition of the body. It is especially important that the diet should contain a sufficient amount of proteids. It is thought the increased capacity for assimilating these tissue-builders that restoration of structure and function takes place. In conditions of suboxidation it is these azotized materials that cause the greatest mischief. The more readily oxidizable carbohydrates seem to appropriate an undue share of the available oxygen, leaving the proteids to undergo imperfect

assimilation and conversion, thus, not only failing to support normal tissue change, but poisoning the system by the generation of toxins. The increased oxidation secured by this method tends to clear the system of the toxic products of disturbed metabolism and to promote the normal conversion of these active agents of tissue renewal.

I am perfectly aware that in this practical age practical results are made the final test of any therapeutic method or agent. In this paper, I have attempted to place the method on a rational scientific basis, following out to some extent its physical and physiologic implications. A report of cases will come later. Results so far are quite encouraging. I have under treatment a group of cases which I hope to make the basis of a report at the Columbus meeting of the American Medical Association in June.

APPENDICITIS.

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The subject of Appendicitis, though young in years, is a quite well worn one in recent surgical literature. It is, however, one of such great importance to the general practitioner, as well as of interest to the surgeon, that I feel justified in bringing the subject before you for discussion.

Appendicitis has, undoubtedly, been a more or less common disease ever since our prehistoric vegetarian ancestors ceased using the appendix as a digestive organ. For a very full and interesting history of the study of this disease I take pleasure in referring you to Dr. Herman Mynter's book on the subject. He says one of the earliest recorded cases is one reported by Mestivier in 1759: "A man had a large abscess which was incised; the man died and at autopsy a needle was found in the inflamed appendix." Other cases are traced as follows: Jadelot, 1808; Wegeler, 1813; Bottomly, 1814; Lonyer-Villermay, 1824; Melier, 1827.

John Burns, in 1837, gives a very clear description of the affection, but lays the trouble to the cecum in most cases, although he says they always depend upon the lodgment of fruit stones and concrements.

Albers, 1838, makes a distinction between acute typhlitis and perityphlitis. The description of the latter is

of a typical appendicitis. He believed it originated in the retroperitoneal tissue from catching cold, &c. He says, "It is not clear, however, why the processus vermiformis should be so often implicated, as the disease generally perforates the cecum."

Grisolle, in 1839, gives almost accurately the pathology as at present understood. He says, "The inflammation always begins in the cecum of the appendix."

Rokitansky, in 1843, gives a clear description of the disease of the appendix: "The recurrent attacks, formation of abscess, &c., and in favorable cases the appendix shrivels up and forms a solid body (appendicitis obliterans)."

Voltz, 1843, reports six cases with the same pathology as that given by Rokitansky.

Lewis, 1856, advised surgical treatment.

Bamberger, in 1858, maintains the cecal theory in the milder cases, while severe ones depend upon perforation of the cecum or appendix, most frequently the latter. (10 out of 12 cases all fatal). He advises opium.

Leudet, 1859, at last gives up the cecal theory, and says that perforations of the appendix is much more common than all other perforations of the bowel.

Willard Parker, in 1867, as we all know, was the first to advocate surgical treatment and carry it out. He reported four successful cases.

Gouley, 1875, and Gurdon Buck, 1876, recommended earlier operations than did Parker.

With, 1879, recommended opium treatment with avoidance of all cathartics. He reports 30 cases with 40 per cent. mortality.

Fitz, in 1886, treated exhaustively of the disease in all its aspects, and was very largely influential in awaking the profession to the importance of early operation.

H. B. Sands, 1888, reports the first successful case of laparotomy inside of 48 hours with extirpation of the appendix and drainage.

Senn, 1889, reports two cases of laparotomy for chronic recurring cases.

Robert Weir, 1889, lays down the rule that if symptoms increase for 48 hours with or without tumor laparotomy should be done at once, and if general peritonitis be present irrigation and drainage should be used.

McBurney, 1889, is the first to report a series of early operations—eight cases with seven recoveries.

Thus the professional mind seems to have ripened gradually during a period of more than a hundred years, largely through the influence of American surgeons, until, in 1891, McBurney's second paper, reporting 24 cases with 23 recoveries, found it entirely ready to agree that appendicitis is purely and always a surgical disease, and calls for the earliest possible operative treatment.

It is remarkable how slow medical knowledge of such vital importance is sometimes spread. The symptoms of a fatal appendicitis had for long been variously called inflammation and congestion of the bowels and idiopathic peritonitis. When the patient happened to recover it was perityphlitis. I may add that such diagnoses are all too common yet.

The appendix may be described as a degenerating, useless, dangerous, little appendage of the cecum from 3 to 5 inches long, $\frac{1}{4}$ to $\frac{1}{3}$ of an inch in diameter, and situated in a quiet corner of the abdomen, where, fortunately for us, it can do least harm when it becomes inflamed. It seems to be a law of biology, more or less constant, that organs which have outlived their usefulness degenerate; they are of low vitality and very liable to become the seat of disease. A glance at the histology and anatomy of the appendix as they are at the present

day, shows good evidence that this is true. The small size, situation and blood supply, and its debilitated muscular coat are all most discouraging to its action as a digestive organ. The result is that probably in the best health of the appendix it acts in the feeblest degree in imitation of what it once did in our ancestors, or what it does at present in some of the herbivorous animals. It probably, in health, receives periodically a small amount of fecal matter, which it retains for awhile and then feebly extrudes to take in again a like amount. While the muscular coats are distinct they are scanty in proportion to the large amount of mucous and lymphoid tissue—a tissue of low vitality, which, like the tonsil, being penetrated deeply by tubular glands, is prone to disease.

Bland Sutton has indeed suggested that the appendix is a sort of abdominal tonsil. It is said that this lymphoid or adenoid tissue is more abundant in the appendices of children and young people than in the old, as we know it to be in their tonsils. Even a very superficial study of the appendix must show that every biological, anatomical, histological and physiological feature of it invites disease. Biologically in compliance with the law that all tissues in process of involution and disappearance have their resistance to disease very much lowered. (Familiar examples of this are the proneness of the uterus and breast to cancer during the period of atrophy.) Anatomically, by the awkward direction of the fecal current, the liability to torsion owing to the imperfect condition of the meso-appendix, the one small artery which constitutes its blood supply, and in most cases perhaps the constantly narrowing or strictured lumen. Physiologically, by the muscular feebleness, rendering it entirely inadequate to empty itself when the fecal matter happens to remain in it long

enough to become hard, or when a foreign body should happen to become lodged therein.

The exciting causes of attacks of appendicitis are catarrhal inflammations, coprolites, ulcerations, strictures, kinks and foreign bodies.

Dr. Jas. A. Mitchell, in the Johns Hopkins Bulletin of January, 1899, has published the results of a very extensive investigation into the subject of "Foreign bodies as a cause of appendicitis." He reports that in 1,400 collected cases he found that 7 per cent. were due to foreign bodies, and that in 45 per cent. fecal concretions were found. A few years ago there was a general belief that nearly all cases were due to foreign bodies. Then the pendulum swung back, and until very recently such cases have been looked upon as very rare, so that Dr. Mitchell's paper will doubtless be a valuable authority for awhile, at least. The list of foreign bodies found in the appendix comprises almost everything that could be imagined; pins are probably the most common, seeds, teeth, round worms and tape worms, shot from eating game, actinomycoses, &c.

Constipation and dyspepsia are said to be predisposing causes, but my limited experience leads me to believe that these are often the symptoms of appendicitis and not the cause. At least eight of the sixteen cases operated on by myself gave a history of dyspepsia, and it is significant that this dyspepsia disappeared after the patients had recovered from the operation. Typhoid fever and dysentery, by causing ulceration, are said to be the exciting causes in a few cases.

The literature of this subject is so replete, and there are so many principles and points of importance, which, on account of the vast number of cases occurring, have been so thoroughly worked up that a paper of this kind can be only an effort to convey to the general practi-

tioner an idea of the accepted standing of the subject in the minds of all surgeons, without attempting to completely array the statistics or quote the opinions of the many who have written about it.

Appendicitis seems to be a white man's disease. It is rare in the colored race. It is more common in males; according to Fitz, 80 per cent. of all cases. Much of this disproportion is probably due more to man's irregular life and habits, than to the fact asserted by some that woman's appendix has frequently an extra blood supply from the ovarian artery.

It is also a disease almost peculiar to children and young adults. This greater frequency is, of course, in great part a relative frequency, there being a great many more young people in the world than old ones. It is actually less frequent, too, in the old, because their appendices are often so strictured and atrophied and contracted as to be practically obliterated. This march toward obliteration, while being the very thing which invites disease, when complete prevents it.

The pathology is, that for some cause the appendix becomes inflamed. The mildest form of this, and the beginning condition, undoubtedly, in most cases, is a slight catarrhal condition of the mucous membrane; this swells as the result of bacterial invasion. The process may be the result of a slight obstruction to the outflow of the fecal contents. This outflow may, from a straightening out of the appendix, become re-established and the appendix drain, and this drainage, taking off the pressure, the tissue cells are enabled to destroy the bacteria which have already penetrated the tissues, and the appendix returns to its normal condition. If, on the other hand, this swelling continues and the lumen becomes hopelessly blocked, the germs penetrate beyond the mucous into the submucous, the muscular, and finally the serous coat of the appendix. The leucocytes

and tissue cells opposing this advance sacrifice themselves with thickenings and adhesions as the result. When the serous coat has been invaded a plastic exudate glues the appendix to the omentum, the cecum, and the folds of the ilium, or the parietal peritoneum, according to its position at the time of the attack. It usually lies slightly bent or twisted just below the cecum in the iliac fossa. It may hang down into the pelvis, or extend transversely across the lower abdomen, or it may be curled under the cecum and be found adherent to the cecum and the peritoneum lining the iliac fossa. These adhesions readily form and shut off the general peritoneal cavity from the inflamed locality, because of this corner of the abdomen being comparatively a quiet one.

The so-called fulminating cases are said to be those, which, owing to the very intensity of the poison, the activity of the bacilli, rapidly spread to a general peritonitis too quickly for adequate adhesions to form. It is probable that most of them are due to the large quantity of septic fluid poured out through the rent in the appendix, rather than to an unexplainable activity of the germs. In these cases too, the appendix will usually be found to be gangrenous, owing to the shutting off of its blood supply. When the appendix leaks a small amount, or when the germs have penetrated the serosa in large numbers, an abscess will be the result; the bowels glueing together and protecting the general cavity with very firm adhesions in some cases, and with very fragile ones in others. The longer these adhesions hold, however, the stronger they become about the appendix. The tendency in all cases is for the pus to accumulate, the abscess becomes adherent to the parietal peritoneum and thus becomes extra peritoneal. If, on the other hand, these adhesions fail to limit the inflammation in the

first place, or if they give way after the pus has formed, a further extension of the peritonitis is inevitable.

The symptoms are not many and usually make the diagnosis unmistakable. The majority of cases will, I think, give a history of indigestion in some of its phases, existing often for months before an acute attack, sufficiently pronounced to be sure about; has occurred. The first symptom of an acute attack is pain, this varies in all degrees of intensity and has the widest range geographically. It is very common for the patient to complain of pain in the right side of the chest or the right shoulder, or it may be in the right loin running down the thigh, more commonly, however, it is a general cramping pain all over the abdomen, particularly about the umbilicus. In most cases, however, the pain localizes rapidly in the right iliac region. By this time, usually a few hours, the tenderness at McBurney's point or thereabout will make the diagnosis almost certain. If the attack is pronounced, there will usually be, after ten or twenty hours, a rigidity of the abdominal muscles of the right side, nausea, and slight to severe vomiting, chilly sensations and fever, with a steadily rising pulse, and leucocytosis.

The prognosis is about as follows: In a given case the chances of recovery from the present attack are about 75 per cent., after recovery, however, the chances that there will be subsequent attacks are about the same—75 per cent. Some statisticians say only 15 per cent. of cases having one attack completely recover. So-called fulminating attacks have the gravest possible prognosis. These are the cases in which the onset of general peritonitis is rapid, either from the early rupture of slight adhesions, or when the spread of infection is so rapid that no adhesions have formed. The diagnosis is easy; given the pain, tenderness in the right iliac region,

chills or chilliness, fever, nausea or vomiting, the anxious face, quick pulse and board-like abdominal muscles, and when all this is confirmed by finding a marked increase above the normal number of leucocytes in the blood, the diagnosis of a pronounced attack is certain. The diagnosis is easy because nearly all these symptoms are nearly always present. In mild cases, there may be only the tenderness to pressure and a slight amount of fever, but the leucocytes are a most reliable guide as to whether or not there is an exudative inflammation, if there is they are always above the normal, (6000 per Cu. M. M.)

Treatment: I believe that appendicitis should always be considered a surgical disease, but the fact is it never is so considered by the general practitioner until he has had a death following the medical treatment, or has seen an operation or an autopsy. This attitude of the general practitioner has changed a great deal in a few years, but there are still many who adhere to the idea that medical treatment will suffice in a majority of cases, and a few who write that it will suffice in all cases. I am convinced that no graver error is committed by the medical profession than this failure to admit that the only prescription for appendicitis is a surgeon, where, at any rate, one can be had. This prejudice in the minds of medical men against going into the abdomen is partly a survival against the old terror of pre-aseptic days, in large part, too, it is, perhaps, due to the experience they have all had of many cases recovering under medical treatment, and the fact of the high mortality of such operations a few years back when we knew less about it. There is, however, unanswerable argument which must forever establish this as a surgical disease, and which it is the duty of every one who is convinced of it to promulgate.

Although the chances are three out of four that a given case will end favorably without operation, and, too, that the severity of the symptoms is, as a rule, an index of the danger, there is no way by which we can know positively that any given case is out of danger. We cannot see inside the abdomen without an operation, and many cases have been lost because all the symptoms have been so slight as not to arouse any fear in the mind of the patient or attendant. One patient I remember particularly which I saw in consultation several hours later, after a rupture into the peritoneal cavity had occurred; had been sick a week, and, although no accurate record had been kept, the attending physician was positive that the highest temperature had been only 101°, and *that* for only one day. The pulse had not been fast, and the patient had had or nausea or vomiting, although he had had a good deal of pain. For two days before the rupture he had been regarded as convalescent, with temperature only 99° in the evening, and he got up and about the room frequently. The rupture came suddenly, and eight hours afterward he was in such a state of collapse that we did not think it advisable to operate, and he died 36 hours afterward.

Even though three-fourths of all attacks will pass off under medical treatment, one-fourth will have an abscess which must either discharge externally, (spontaneously or by operation), or by the bowel, or into the peritoneal cavity. The mortality attending these cases is about 25 per cent. at the lowest estimate, which gives about six deaths in the hundred cases. To this must be added the estimate that at least 75 per cent. of the 75 per cent of the cases recovering from the attack, (or 57 cases out of the 100,) will have recurrring attacks until death or a cure has been effected. Now, of these 57 cases about 25 per cent. (14 cases) will die as a result of a late operation or medi-

cal treatment or rupture, so that we have the ultimate mortality from all cases treated medically and operated upon late as 20 per cent. when this is contrasted with the 2 per cent. or less mortality of operation during the first 24 hours, it will be seen that it is only a question of the reliability of statistics. From the great mass of these collected in Herman Mynter's book, and all pointing in the same direction, I take the following small amounts at random as to patients under strictly medical treatment, or nearly so:

Guttman, Berlin, had	96	cases	with	5	deaths.
Fowler, Middlesex Hospital,	99	"	"	15	"
McDougall, Edinburg,	150	"	"	37	"
Prof. With,	80	"	"	28	"
Floystrops,	150	"	"	15	"
	575 in all		with	100	deaths.

An average of these gives 17 per cent. mortality under medical treatment of a single attack. There is no record possible, of course, of the 83 per cent. who went out as cured, at least 75 per cent. of these, or 357 patients, undoubtedly had subsequent attacks, with a further mortality of about 14 per cent., making a final mortality of 17 + 14 = 31%. Mynter says again, "Dr. Samuel Lloyd, of New York, in order to compare conservative with operative treatment, has examined 558 cases, all serious enough to be published, and his conclusions are, to say the least, startling. Of the 558 patients, 263 recovered and 295 died, the mortality being 53 per cent. 220 were operated upon, of whom 31 died, i. e., a mortality of 13 per cent., while of the 265 treated conservatively 205 died, i. e., a mortality of 77 per cent. 445 of these 558 cases (i. e. 79 per cent.) resulted in abscess perforation or diffuse peritonitis."

These last statistics, of course, were of the severe cases, but they are useful in showing what will result when the medical man has his way over the surgeon when a patient happens to be ill enough to require consultation.

"Sahli, (quoting Mynter again) on the other hand, reports 7,213 cases from 466 physicians, 473 were operated on with a mortality of 21 per cent., while 6,740 were treated conservatively with a mortality of 8.8 per cent. Sahli considers the high mortality of the operated cases the result of operating only in the severe cases, and then only too late."

It occurs to me here that nearly all patients in the hands of medical men believing in the conservative or medical treatment, will necessarily be operated upon too late, when they are operated upon at all. While it is impossible to obtain accurate statistics, first, as to the extent of the disease of the appendix in those cases which recover under medical treatment, second, as to what proportion of the so-called recovered cases will have recurrences and die, and third, as to what proportion of those operated upon late die, and how many of those operated upon, but from whom the appendix is not removed, have subsequent trouble, it is well agreed that operation within the first 24 hours, with removal of the appendix, shows a mortality of less than 2 per cent. with never any subsequent trouble to the cured patients.

The treatment of appendicitis, of course, is immediate operation, day or night, as soon as preparation can be made, in all cases severe enough to make the diagnosis reasonably certain. In mild cases, there is usually some slight or severe digestive disturbances which are present between attacks, and which will be entirely relieved by the operation. Of course, operation is advised in all

cases immediately, because of our knowledge of the condition based upon the statistics given above.

In the mild cases and between attacks, the appendix is usually freed easily from slight adhesions, tied off, or preferably turned into the bowel, after Dawbarn's method. If there are no extensively infected surfaces, such a wound should be closed without draining, with buried silver or tendon sutures. When the appendix is extensively adherent to the neighboring serosa, whether or not pus is found around it, a gauze drain should be left after removing the appendix. The abdominal wound should then be closed with through and through silver, tendon, or silk sutures, except for a small space for an inch or less left in the middle or at one end of the wound for the exit of the gauze drain. This will usually come away in four or five days. When adhesions have formed about a larger abscess, and it has become extraperitioneal, and the patient's condition is critical, all our efforts should cease when we have carefully cut down to the pus. The least exit of pus gives a great deal of relief to the symptoms, tides over completely the immediate danger of an intraperitoneal rupture, and allows time for the adhesions to become strong. Attempts to remove the appendix, exploring the wound with the finger, and even enlarging the incision in this dangerous stage, have done and are still doing more than all else together, except, perhaps, late operation, by inexperienced operators, to bring the surgical treatment of appendicitis into bad repute.

Where the abscess has ruptured peritoneally the opening through the abdominal wall should be free enough to allow of removing the appendix and infected omentum, and thoroughly mopping out, irrigating, and draining the abdominal cavity.

If this operation is delayed much over four hours, general peritonitis will have set in, and then the opera-

tion will have to be still more radical, evisceration and wiping away roughly all infected patches found on the parietal and visceral peritoneum, irrigation, and extensive gauze drainage. In such cases the mortality is very high (50 to 75 per cent.)

The medical treatment I have used in the following sixteen cases has been largely opium, but never to the delay of the operation; this I believe in most thoroughly both before operation and after. Before, to relieve pain and allow the adhesions to become firm, or rather to lessen the danger of rupture by keeping the bowel and the patient quiet, and afterward, for pretty much the same reason. For the same reasons we do *not* use purgatives, at least until four or five days after the operation. Aside from opium, strychnine and the hypodermic infusion of salt solution, have been our only medication.

At the present day there is little diversity of opinion as to the value of surgical treatment in this disease, in fact, the enormous array of statistics gathered from the most distant sources, and available to every one, renders all argument for it superfluous, but there is one thing, the importance of which cannot be too strongly insisted upon, and that is the competency of the surgeon. There is no surgical disease so amenable to treatment in competent hands, and none so fatal among the occasional or poorly equipped operators. There is no surgical disease wherein a thorough knowledge of surgical principles is so important. Acquaintance with bacteriology and the physiology of the peritoneum are absolutely necessary to any rational handling of a case of appendicitis. There are many different conditions found by the frequent operator, and the successful meeting of these depends altogether on his knowledge of principles, his anatomy, physiology and the like. This

skill and knowledge are acquired in the safest way by going and learning with eye and ear of those who are already skilled, otherwise it must come. if it comes at all, by bitter experience to himself and others. The surgeon who realizes the value of being thoroughly prepared will recognize that a thoroughly equipped operating room and competent assistants are no small part of it. Many conditions may arise and he must be prepared to meet them all, and this he cannot do unless he is willing to spend time and patience and money and study, on his equipment. Almost every general practitioner nowadays has operated on a few cases, but with hardly an exception they can recall cases which might have ended differently if they had been better prepared. It should be no excuse that one did the best he could, he must spare no effort to be equal to the best when the best get such good results, or he must confess himself not prepared to treat such cases.

Of my sixteen cases the patient were all white. Nine were males, aged respectively, 22, 25, 15, 46, 26, 21, 18, 34 and 27. The females were aged 65, 17, 13, 6, 26, 36 and 28. Six of all these cases were from six days to four weeks old and had extraperitoneal abscesses, which were incised without removing the appendix. All of these six patients recovered without any after symptoms, except the little girl of 6, who, at the time of operation, had a very large abscess and was in a most critical condition. She now, after eighteen months, still has a small sinus, but refuses further operation. One of these abscesses in a man at 46 was opened under cocaine anesthesia.

Two cases had abscesses which were not adherent to the abdominal wall. In one of these the appendix could not be found, but the wound was drained and recovery ensued with no symptoms now after 21 months. In the

other a rupture had occurred just before the operation, but it was not certain, so that the peritoneum was not cleaned and a gangrenous appendix was overlooked. This gangrenous appendix presented in the wound the day after the operation and was removed. This patient had a severe infection for a week, and then for a week he had a normal temperature and seemed to be convalescent, but had a sudden recurrence on the 12th day and died three days later from general peritonitis. This was my only fatal case—the fourth one operated opon—so that I have now had a series of 12 cases without a death.

In eight cases the appendix was removed. Two of these operated upon during the first 24 hours, and one in the interval, were closed without drainage.

Of the remaining five cases four were operated on the second day and one on the third day. In all these cases the stump was turned into the bowel, the abdominal wound closed, except for the space of about an inch in the middle which was packed with a gauze drain. In none of these cases, in which the appendices were removed, did I find any foreign body. In the case of the little girl of six who has the fistula, a number of coprolites passed at intervals for several months.

I give finally a short history of each case:

1st. July, 1893, white, male, aet. 22, first attack—extra peritoneal abscess, incised on 6th day, convalescence uneventful. No subsequent symptoms.

2nd. April, 1896, white, female, aet. 65, dyspeptic, first attack—extra peritoneal abscess incised and drained. No subsequent trouble four years later; gained much in flesh, strong and hearty. No dyspepsia.

3rd. July 3rd, 1897, white, female, aet. 17, dyspepsia, third attack; adhesions about the appendix separated and drained on 6th day; appendix not removed; recovery uneventful. Slight occasional pain during subse-

quent three years; no dyspepsia; but no attack with fever.

4th. Sept. 12, 1897, white, male, aet. 24, first attack; intraperitoneal rupture on 4th day. Operation three hours after rupture, pelvis and iliac fossa drained, recovered from collapse and seemed to be convalescent for a week when symptoms of general peritonitis set in and he died at the end of two weeks. The gangrenous appendix came away in the wound on the second day.

5th. October 4, 1897, white, male, aet. 46, first attack; extra peritoneal abscess of about three or four weeks standing opened under cocaine anesthesia; recovery uneventful.

6th. October 4, 1897, white, female, aet. 12, second attack; third day of disease; extraperitoneal abscess incised and drained; uneventful recovery.

7th. October 9, 1897, white, female, aet. 26, operation six months after second attack. Had pain and slight tenderness; appendix removed, apparently normal; no drainage; primary union, prompt recovery.

8th. December 12, 1897, white, female, aet. 6, second attack; large abscess occupying whole lower abdomen incised on right and left sides; left side contained greater amount of pus but closed in a few days. Right side had to be repeatedly opened for many weeks and coprolites taken away; small fecal fistula still persists at present (18 months afterward).

9th. January 6, 1898, white, male, aet. 15, first attack; operation 26 hours later; appendix swollen, adherent, and containing one dram of pus, nothing else. Appendix and portion of omentum removed; small drain; greater part closed and united primarily.

10th. May 27, 1898, white, female, aet. 34; bad health for years; dyspepsia and pain. Operation after first attack on tenth day; large extraperitoneal abscess,

Six months afterward had entirely recovered from pain and dyspepsia, and grown stout.

11th. July 30, 1898, white, male, aet. 28, second attack. Operation second day, appendix adherent and contained pus, no abscess; wound closed, except a small part left for small drain; convalescence prompt, except for stitch abscess.

12th. November 15, 1898, white, male, aet. 22; dyspepsia and pain for several weeks. Operation 24 hours after onset of pain; fever, tenderness and vomiting; appendix size of index finger, slightly adherent, containing only pus; small drain left in; convalescence rapid.

13th. December, 25, 1898, white, male, aet. 16, third attack in six months; chill, vomiting and great pain. Operation 22 hours after onset; very slight adhesions; appendix larger than thumb and contained half an ounce of blood or bloody serum; wound closed without drainage; convalescence prompt.

14th. January 29, 1899, white, male, aet. 33; dyspeptic six years; first attack. Operation 3rd day; appendix curled under cecum in iliac fossa, densely adherent; no abscess; appendix size of index finger removed, contained two drams of pus only; small drain, four-fifths of wound closed; convalescence rapid.

15th. Mrs. C., aet. 28; history of occasional colicky pains and dyspepsia for two years; mild attack; second day; serosa or appendix injected but no adhesions; appendix contained pus; wound closed without drainage; primary union; convalescence uneventful.

16th. Mr. S., aet. 28, March 27, 1899, 3rd day, first attack. Appendix ruptured through mesenteriolum a short time before operation; one half pint of bloody serum in abdominal cavity; sponged and irrigated away;

no adhesions; appendix easily removed. Temp. that night 105 degrees due to absorption of infected solution remaining in cavity. Convalescence steady for 12 days, and tben unaccountable chills and temp. 102 degrees to 104 degrees for several days, which proved later to be due entirely to a toxaemia from the stomach and bowels, by rapidly disappearing under active calomel purgation. The wound is now (3 weeks after operation) healed, and patient out of bed.

There has been no hernia following any of these operations.

SANITATION OF CITIES.

By Glenn Andrews, M. D., Montgomery,

Junior Counsellor of the Medical Association of the State of Alabama.

The subject for consideration is one of vast scope and great importance, and can only be treated in a cursory way in the short time allotted for this paper. Unfortunately the general sanitation of cities has been so much neglected that most of our principal municipalities have been constructed with but little care being given to this most vital necessity. In considering this subject cognizance must be taken not only of what must be done in order to secure good sanitation, but how the work can be accomplished. In other words it is imperative to know what appliances and improvements are necessary in order to place a city in sanitary condition and then how best to obtain satisfactory results from such agencies after they have been supplied. Pure and clean air, water, soil and food constitute the basis of correct sanitation and all efforts must be directed toward obtaining these conditions if the general public health is to be properly guarded. The water supply is of most vital importance and should be under the direct control of the municipal authorities. Unfortunately oftimes this necessary principle of life has to be drawn from questionable sources. Undeniably many of the most fatal diseases known to the medical profession are conveyed through this medium, and every precaution should be

used to guard against this evil. Springs or deep wells undisputably afford the best supply, but unfortunately these are not always obtainable. Filter galleries when properly constructed may furnish a wholesome supply. A wholesome water may be obtained from running streams of large volume but when the supply comes from such sources great care should be used to prevent the stream from becoming polluted at a point near the source of supply, and in every case the water should be filtered before being supplied to the citizens of a community. Great care must be had in keeping the public reservoirs or wells cleanly and in having the water ærated and constantly freshened by fresh water being supplied to such reservoirs. Water supplied from cisterns may be pure and good, but these conveniences are too much neglected and too easily polluted to be recommended. Shallow or sipe wells can only be mentioned to be condemned. In crowded communities they serve only as death warrants and can be countenanced on no grounds. Prohibitory laws should obtain against them in all cities. Every city should own and operate its water supply and should throw such safeguards around it as to guarantee to the public, as nearly as possible, a bountiful supply of pure and wholesome water. Marts of trade spring up regardless of topograpical conditions, and it is left to the sanitarian to devise means of ridding the community of pestiferous maladies which are due to faulty local conditions. Perhaps nothing taxes the ingenuity of the health officer more than to suggest the way to make a given locality salubrious. The soil, of course, must be drained as nearly as possible of all moisture and otherwise rid of all disease breeding substances. This implies a system of sewerage and naturally leads up to the consideration of how best to dispose of garbage and excrementitious substances. The disease breeding character of decomposing animal and vegetable matter aided by moisture is

too well recognized to question, and that system of prevention must be employed which gives the readiest and most complete protection against these evils. A complete and comprehensive system of sewers both for the purpose of draining the soil and conveying away deleterious collections should be supplied to every city. When a community once supplies a means by which the inhabitants can rid themselves of such nuisances the enforcement of sanitary regulations is of easy accomplishment.

Sewers for storm water and surface drainage are necessary in order to reduce the surface moisture as greatly as possible. But of vastly more importance is a system of sewers for the collection and conveying away of human and animal excrement, slop waters and liquid swill. It can hardly be denied that the emanations from the human being, aside from being most offensive, by polluting the air, water, and food supplies gives rise to more disease than any other one cause. Too great care, then, can not be exercised in providing a means to get rid of this pest. No city can hope to get quit of recurring epidemics of some of the worst forms of disease until such provisions are made. When a system of sewers is once laid, rigid laws should compel every property owner in the community to make use of them, and all human excrement, chamber slops, animal droppings and liquid swill should be passed into them. Of course, proper facilities and safeguards must be provided for their frequent and thorough flushing and perfect cleanliness. It is not the province, however, of this paper to discuss these details.

The final disposal of sewage is a question of great moment and of frequent trouble. When a city is located upon a running stream of large volume, it can be readily disposed of. However, before the sewage is allowed to pass in to the stream it should be disinfected as nearly

as possible. The sewage from inland cities is best gotten rid of by distant fields and distributed. In some instances it is collected and converted into fertilizers for commercial use. This mode of disposition, however, is of recent invention and has yet to be established. Proper means for sewage disposal can always be provided and should never stand in the way of establishing a suitable system of sewers. Surface closets or dry box closets can be kept in good condition, but it is safe to say that they never are. They are extremely objectionable on account of offensiveness, and neglect will necessarily cause them to be sources of danger.

Cess pools or pits are so disgusting, nauseating and filthy that terms of condemnation too severe can not be applied to them. The sources of danger arising from them are so numerous and well accepted that I will not burden you with mentioning them. No community possessed of the true conception of advanced sanitary thought will tolerate them, but it is archaic in its ideas and blinded to its own best interests. The value of sanitary sewage was well demonstrated in the city of Montgomery in the summer of 1897. The greater portion of the city is supplied with a system of storm sewers for the collection of surface drainage and a separate system of sewers used exclusively for the collection of water closets, chamber slops and liquid swill. The western portion or about one-fifth of the city is not supplied with these conveniences. On Sept. 6th, 1897, the first case of yellow fever was introduced into this locality, and it festered and gradually spread in a mild form until when discovered about five weeks afterward, it had invaded a number of homes and covered a large area. The territory invaded, however, was supplied with surface closets and the collections about the premises, in spite of every effort to prevent it, would find their way into the yards and surface sewers. The disease travelled

but one block eastward and stopped. The sanitary sewers were in perfect operation from this point throughout the greater portion of the rest of the city. Subsequent to this time a number of cases were carried into other parts of the city, but were easily confined to the houses where they occurred, and did not, in a single instance, spread from one house to another. This circumstance is too pregnant with suggestions to be passed over lightly. *Street Cleaning* is properly considered at this point. All thickly settled communities should have paved streets and walks. The pavement should be of an impervious substance and so laid as to prevent the soaking in of water or other fluids. The construction should be such as to afford ready and complete drainage and under no circumstances, if possible to avoid it, should surface sewers be allowed along them for any purpose except to carry away storm water. The throwing of offal or garbage of any kind into the streets or alleys should be strictly forbidden. Alleyways, especially in the business districts, should be paved by all means. Paved streets should be swept at such time as is necessary to keep them clean, and unpaved thoroughfares should be cleaned as nearly as possible by having foul droppings removed from them. Constant travel serves to pulverize the collections of various kinds which find the way into the public highways and they are wafted by the winds in every direction and are fruitful sources of evil. Constant sprinkling, together with frequent cleanings, is the only means to counteract this evil. Scavenger collections should be carried well away from the city and either burned or buried. Crematories are in operation for this purpose at some places but are expensive, and as yet are not in general use. Under no circumstances should such collections be used to fill in drains or washouts around the city, a practice, unfor-

tunately, entirely too common, for such places from necessity will breed disease of the most virulent character. None but the unscrupulous can object to the proper inspection of human food. Meat, milk, butter, cheese, teas, spices, flour, etc., are readily polluted or adulterated, and since they enter largely into the daily food of man, each community should have a complete oversight of all establishments which supply such articles of diet to its citizens. The slaughtering of animals and sale of meat for food should be under the direct supervision and control of every municipality. The common slaughter pens so universally in use are mere seething cess pools so nauseating and disgusting as to cause one to revolt at the thought of eating meat which was rendered at such place. Disease of serious nature is common in herds of cattle and swine and unquestionably diseased meat is frequently marketed either through ignorance or by unscrupulous persons. Every city should have certain fixed places for slaughtering and rendering all animals intended for food. The houses to be constructed according to improved sanitary methods. All animals should be subjected to an ante and post-mortem examination made by officers of the city. The regulations governing such examinations should be rigid, and the officers empowered to destroy all meat found diseased or otherwise unfit for human food. A supervision of the markets is necessary in this connection, fish, vegetables, poultry and other perishable foods should be looked after. On January 1st, 1897, a union slaughter house was put in operation in the city of Montgomery, by ordinance of the City Council. The building was located and constructed according to specifications made by this ordinance. Inspectors were appointed and are paid by the city, a small fee being collected for each inspection made, whose duty it is to inspect all cattle offered for slaughter. Such cattle may

be rejected from slaughter if found diseased or otherwise unfit for food, or may be condemned, killed and tanked. On post-mortem all meat showing evidence of disease or otherwise unwholesome, is condemned, seized and destroyed. All meats brought into the city are subject to examination and condemnation. The inspector's decision is final, and the laws are rigidly maintained. Since this slaughter house was opened in January, 1897, until April 1st, 1899, there have been 41,612 animals offered for slaughter, 780 were rejected and not allowed to be slaughtered for various causes. Three hundred and nineteen were condemned and destroyed on post-mortem examination. Fifteen thousand, nine hundred and thirty-six pounds of bruised meats and diseased livers and kidneys have been tanked, and a total of 58,344 pounds of meat has been destroyed during this period as diseased or otherwise unfit for human consumption. All meat supplied to the local market is required to be slaughtered at this union abbatoir and all meats brought in from the surrounding country or shipped into the city from other States is subject to examination. As a result of this system of inspection the quality of meat supplied has been much improved and the consumption greatly increased. A strenuous effort was made to break down the laws when they were first enforced, but the courts have sustained them at every point and public sentiment is such now that it requires but little effort to enforce them. A strict supervision should be had over all dairies supplying the city with milk. Inspectors should have perfect knowledge of the conditions of every dairy from which milk comes into the community, and should supervise and direct the care of the cows, the manner of housing and feeding them, the pasturage and water supply as well as furnish intelligent information as how best to collect, care for and dis-

tribute the milk. It is of prime importance that the dairy cows be carefully examined and such as are diseased or otherwise unfit for supplying milk, be excluded from the dairies. About one year ago the work of supervising the dairies was first put in operation in the city of Montgomery and the results have been very beneficial. The law requires an inspection of the dairies, and examination from time to time of the milk supplied from the different dairies for butter fat, and a chemical analysis for detecting foreign substances, if such has been added. The cows of each dairy are required to be inoculated with tuberculin, and all that give rise to reaction from this drug, or such as otherwise found diseased, are eliminated from the herd. A total of 454 cows have been thus examined. Eighteen have been rejected for tuberculosis and eleven for other causes. Autopsies have been held on two cows and the diagnosis was fully sustained by manifest evidence of tuberculosis. The dairy supplies have been greatly improved since this system was put in operation and already there has been established a pasteurizing apparatus in connection with one of the largest dairies supplying the city, and all products therefrom are delivered free from germs of any kind in hermetically sealed jars. Legal regulations of such important character will from necessity bear good results.

The question of food adulteration and its remedy is a broad one and can be discussed infinitely. I will only add that the health department of every city ought to be supplied with the means of inspecting and controlling the sale of all perishable food and such as are usually adulterated. The management of contagious and epidemic diseases is frequently of difficult accomplishment, especially in small communities, due to the lack of hearty co-operation on the part of the profession. Every city should have comprehensive and rigid laws regulating

the control of such diseases. Physicians in attendance and heads of families should be required to promptly report to the health bureau each case of suspicious sickness occurring under their observation or in their family, and a failure to do so should be punishable by fine. The health officer should have the right and be required to make all necessary inquiries into the case of sickness, and to take such steps as are necessary to confine the disease to the house where it occurred and to ferret out its origin if possible. Of course the health department must not interfere with private rights of the practitioner in the care of his patient. But must only see to the proper enforcing such regulations as will prevent the spread of the contagion. Ordinances should make it obligatory upon the health officer to make a personal investigation of all such cases reported to the department.

This will afford the best protection to the city as well as relieve the embarrassment, which frequently arises, from physicians disliking an apparent interference with their affairs. A perfect record must be kept of all such diseases, and when the patient recovers or death ensues the premises should be thoroughly cleaned and disinfected under the supervision of the health authorities. Bodies of those who have died from contagious maladies should be prepared for burial by prescribed regulations and interred as early as possible after death, public funerals being positively forbidden and only the near relations and necessary number of friends being allowed to attend. The department must have a fumigating corps, thoroughly equipped with such contrivances as are necessary to rapidly and thoroughly disinfect, fumigate and cleanse houses where contagious diseases have existed. As soon as a case of such illness is reported by the attending physician as having fully recovered,

the apartments occupied by the sick person must be taken in charge by the health department, and so thoroughly cleansed as to prevent the possibiliy of the disease recurring from this source of infection. Comprehensive ordinances are necessary in order to empower the department with authority to do such work completely. A strict supervision of the cemeteries should be enforced at all times by the health department.

In no field of work, perhaps, has the sanitarian better opportunity of accomplishing good than in the management of the public schools. His work begins in the location and construction of the buildings and a perfect knowledge of the topography of the surrounding territory and character of the soil upon which the building is erected. He should determine the seating capacity of each room according to the air space, light and ventilation, and heating must be carefully provided for, and properly constructed latrines and closets are of prime necessity. Frequent investigations are necessary to keep the buildings and grounds in sanitary condition, but more important still is the direct care and supervision of the children. The health department of every city should be required to examine all children applying for admission in the public schools. They should show evidence of recent successful vaccination and be excluded if evidence of contagious disease is manifest. The principals and teachers of the schools should be instructed to keep a close watch over the children and when any appear ill to send them at once to their homes. Those who have suffered from infectious or contagious disease must not be allowed to re-enter the schools until after complete recovery and then they should be required to hold a certificate entitling them to re-enter school from the health department. All children living in the same house or who have been exposed to contagious affections

must be kept out of school until after the period of incubation, fixed by regulation, has passed since exposure to the disease. Each community ought to be supplied with a hospital for contagious diseases, for whenever a case of such illness occurs prompt removal of the patient to a place of isolation and immediate fumigation of the former premises occupied by the person will estop the disease and thus prevent the danger of its spreading among the people. Such regulations are of course essential, but there is yet a broader plane for the sanitarian's genius in conducting public schools. It is quite the fashion nowadays for municipalities to tax themselves to the utmost for the purpose of perfecting the school systems. This idea is based upon the well fixed belief that a superior education is essential to produce the highest order of citizenship. In one sense this is true, in another fallacious. An intellectual giant with puny body can never attain the highest degree of usefulness as a citizen and fails necessarily to accomplish what might have been if more attention had been given to physical culture along with mental training. Children upon application are admitted to school and graded according to mental advancement to certain classes indiscriminately. No attention whatever is given to age or physical condition; tasks are assigned and each child forced to keep abreast with the day's work and to perform like duties during a given period of time. Weakly, cachetic, scrofulous, strumous children and those of tuberculous tendencies are classed with the robust and healthy and the same requirements exacted of them. Such children, as is well recognized, are frequently precocious and are pressed to the head of the class. The brain rapidly develops at the expense of the body and soon the child blights, withers and dies, or if by ill chance life is spared, it develops into immature manhood or womanhood, and though possessed of a high

order of mental attainment is a failure as a citizen, due to an overburdened and ill prepared physical constitution. Competent physicians should be supplied to the public schools whose duty it should be to examine and classify the pupils according to their physical condition. They should regulate the hours of study and place a limit upon the task required, according to the physical ability of each child. Supervision should be had over the exercise taken and healthful sports and athletic contests should be encouraged. When a child is apparently failing, it should be sent from school and the parents advised to place it in the hands of the family physician.

Hygiene, by requirement, ought to be taught in the schools. Of course such a system as this implies additional salaries and the unthinking rebel at the thought, but the wisdom of such measures is too obvious to need further argument. It is our duty as physicians of both mind and body to implant this idea into the communities in which we reside and so insist upon it that finally obstacles will fall and such vitally necessary sanitary regulations will be adopted by the schools. All public buildings and manufactories should be under the supervision of the health department and should be required to be kept in proper sanitary conditions. Certain manufactories are frequently foul and a menace to public health; these of course must be closely watched. Such business by law should be forced to be carried on in buildings so constructed as to endanger the health of operatives as little as possible, and the strictest sanitary regulations must be enforced. City prisons are universally bad. They are constructed without consideration for air, space, light, heat, ventilation or comfort. Most of them can only be examined to be condemned. Another, however, more able than I to discuss this topic will present a paper for your consideration. In a hurried

way I have outlined the more salient provisions necessary in order to maintain good sanitation in a city. These provisions can be fully established, but if not intelligently carried into effect but little will be accomplished.

The sanitary department of a city is in many respects its most important branch. The work of the department is purely for the purpose of protecting the public against disease. Ample means and a sufficient force of men should be supplied the department. The department should be controlled by an intelligent physician, possessed of some knowledge of both chemistry and engineering, there should be assistant physicians, and the main force should be composed of a sanitary engineer and men skilled in plumbing and a force of intelligent men of sufficient number to keep the city well under observation by daily inspections. Correct records should be kept by the department of all its work. The sanitary policemen, or inspectors, should be furnished with printed forms outlining the information necessary to be known regarding the different houses and premises in the community. A record should be made of every premises in the city and kept for purposes of future reference and use. This record should note the location, size of lot, character of soil, surface conditions as regards dampness, drainage, house whether wood, brick or stone, vetilation, manner of heating, number of stories, cellar or not, outhouses, proximity to other houses, plumbing, how lighted, domestic animals number and kind on premises, conveniences, number of inhabitants, probable age of building, what diseases have recently occurred in the house, number of deaths and time and cause. The value of such record is obvious, and it will necessitate much trouble and care to compile it, still the information is most valuable, and when once

obtained can be changed from time to time with but little difficulty. The sanitary police by daily inspections should enforce the regulations requiring the keeping of private premises in proper sanitary condition. No collections of animal or vegetable matter should be allowed to remain about the place, such being conveyed to the streets daily where it can be carted away. Throwing of slop water or swill into the yards must not be tolerated. These inspectors also should take cognizance of general sanitary conditions and should report condition of closets, bath rooms, gas fixtures, all plumbing, surface closets, if they exist, and cellars, if one. Sickness, if any, and attending physician, and give complete information regarding the sanitary condition of the premises. Ordinances governing the department must be so framed as to give the health officer absolute authority to enforce all needful regulations, and it is necessary to have expert men connected with the department who can make proper examinations and give correct advice how to remedy many faulty conditions which are discovered to exist throughout the city. The officer in charge of the sewers of the city should make daily reports, and likewise the one in charge of street cleaning and garbage removal. By constant, energetic and faithful work of this character, the department can be kept comparatively accurately informed as to the sanitary conditions of the city, and is prepared to direct the work with ease and intelligence, being thus enabled to accomplish much for the benefit of the public. Of course, certain districts of every city needs more care and attention than others and health regulations are enforced in them with greater difficulty. However, people generally have great respect for law, and the beneficial results from good sanitation are so readily apparent that public opinion soon stands at the backs of the sanitary officers and the burden of keeping a city clean is thus greatly relieved.

The health officer of a city ought to be appointed for a long term of years and paid a salary sufficient to demand and command all his time to be devoted to the work of this department. A sum of money adequate to meet the necessary expenses for conducting the department and making from time to time needful sanitary improvements should be supplied, and the health department should have a contingent fund absolutely at its command to be used when necessity arises for ferreting out the origin of a contagious or epidemic disease, and to provide the means to prevent its introduction into the city or estop it if it has once made its appearance in the community.

FOUR CASES OF MONSTROSITIES IN THE SAME FAMILY.

By William Monroe Hestle, M. D., Buena Vista.

Member of the Medical Association of the State of Alabama.

Deeming the following history worthy of record, bearing as it does upon an interesting and obscure subject in physiology, I herewith submit it, with the hope that some of the members present may be able to interpret and explain the phenomena related.

Inez C., age twenty-one years, a strong, well-formed, healthy mulatto girl, weight about 145 pounds, of average height, was married April 30th, 1892, she being then seven months advanced in gestation.

Her husband, Jabe C., age twenty-five years, was of robust figure, weight about 185 pounds, occupation, a farmer. No indications of a venereal or other disease in either husband or wife,—both exceedingly healthy. May 13th, 1892, (thirty days after marriage) Inez gave birth to her first child,—male, still-born; apparently about the seventh month of gestation; body was well developed, but there were neither arms nor legs, hands and feet were perfectly developed, with the proper number of fingers and toes, but they were attached directly to the body; the former at the shoulder, and the latter at the hip joint. Auricular appendages were absent, but the external auditory meatus seemed to be perfect. Convalescence rapid.

July 30th, 1893, she was delivered at full term of a well-formed, living female child; arms and legs being normally developed. This child is still living and healthy.

October 17th, 1895, she was delivered, at full term, of another well-formed, living, female child. This child is also living and enjoying good health.

November 5th, 1897, she was delivered of a still-born, male child, about the fifth month of gestation. The body of this child was well formed, but like the first, was without arms, legs, or auricular appendages. Hands and feet were attached to the body.

February 15th, 1898, she was again delivered of another still-born, male child, the specimen which I show you, and which you will observe has a well developed body, but has neither arms nor legs, and the auricular appendages are rudimentary. Hands and feet are attached to its body.

[See Plate opposite, made from photograph of specimen.]

Labor in this case was normal, except an adherent placenta, for which I was called and which I succeeded in delivering without any difficulty. Convalescence was rapid.

December 15th, 1898, she gave birth to another still-born, male monster, about the seventh month of gestation, which, like the preceding ones, was without arms, legs or fully developed auricular appendages. Hands and feet attached to the body.

You will observe that all of the male children were deformed, and that the malformation in each case was similar, having occurred in the first, fourth, fifth and sixth pregnancies; while her second and third children, females, were living, well formed and healthy.

From the parents I obtained the following history:

During the mother's first pregnancy, about the third month of gestation, her brother entered her room about

eleven or twelve o'clock at night with a living opossum, which he threw on her bed, frightening her very much. From that night on she suffered more or less apprehension lest her child would be deformed. Aside from this morbid impression nothing unusual occurred during the remainder of her term.

While pregnant with her second and third children, she was not frightened with anything; but during each of her last three pregnancies she was frightened about the third month of gestation bv seeing an opossum, after which she suffered almost constant fear that her child would be deformed, and this fear was augmented after the birth of the second monster. The parents know of no deformity in any of the relatives on either paternal or maternal side.

Now, the question arises: How shall we account for the phenonmena related?

The subject of maternal impressions is a very profound one, involving as it does the connection between mind and matter, into the discussion of which I shall not attempt to enter. But, looked at from a practical point of view, we seem warranted in concluding that there was a direct causal relation between the fright the mother received in her first, fourth, fifth and sixth pregnancies and the deformities that resulted to the respective fœtuses. The fright in each of the pregnancies just mentioned was from an opossum, and there was a striking uniformity in the deformities of the fruits of those pregnancies.

It is well known to you all that the legs of an opossum are very short, and therefore that the feet are very close to the trunk. It will be noted that the deformity in the four fœtuses in question consisted mainly in the want of development of arms and legs, suggesting a similarity to the opossum.

Another point of similarity: The auricle in the opossum is rudimentary and invisible on casual inspection. In the deformed fœtuses there was an absence of full auricular development.

The facts, therefore, seem to justify the proposition that the fright the mother received, and in the ways mentioned, so interfered with the development of the fœtus as to result in the deformity described, one specimen of which has been presented for your inspection.

I will not attempt to trace the way in which an impression, made upon the mothers mind, could modify the the development and shape of the child's body, but will leave the explanation, if there be one, to any gentleman who chooses to offer it.

DISORDERS OF NERVOUS SYSTEM ACCOMPANYING GYNECIC DISEASES.

By R. S. Hill, M. D., Montgomery, Ala.

Counsellor of the Medical Association of the State of Alabama.

The progress in the science of medicine precludes the possibility of the entire field being properly surveyed by one mind, therefore specialists are necessary for the satisfactory cultivation of its soil, much of which remains yet to be upturned by the ploughshare of research. No one, however, is fitted for a specialist who is not well grounded in the general subjects of anatomy, physiology and pathology, for a clear appreciation of the relationship and interdependence of the various tissues of the body is necessary in order to judge of the effect produced on the function or structure of one tissue by disease of another. This being manifestly important in reaching a correct diagnosis. Battey's and Tait's opinion that the removal of normal avaries would cure nervousness, not only had no physiologic justification, but showed a total disregard for the general principles of physiology. I feel safe in saying that our present knowledge will not tolerate a suggestion that the normal function of any organ can disorganize that of another, notwithstanding the seeming exception of vomiting in pregnancy.

Viewing the human system as a most delicate and complicated piece of machinery, its cells differentiated into many groups called organs and glands, it is readily understood how the impairment of one or more of the organs may derange the entire system. I recognize,

however, the fact that the female genital tissues are not necessary to individual life and, therefore, an exception may be taken in their case; nevertheless, I believe the connection between these parts and the rest of the system is so intimate and intricate as to justify the opinion that gynecic diseases and injuries are primarily responsible for many nervous disorders. I am free to admit that abnormal nervous manifestations may present themselves in a patient with disease of some portion of her genital tissues, without there existing the relationship of effect and cause; and I confess that I know of no way of reaching a positive conclusion as to when the gynecic disease is producing the nervousness.

Turning our attention to the nervous system, we find a marvelous anatomic structure, surpassed only by its wonderful physiologic action. Its cells possess a most delicate sensitiveness for the perception of impressions or impulses, an inconceivable capacity of association for their analysis, and an incomparable retentive force for their preservation. There exists between the cells a perfect state of equilibrium for uniformity in action. While these faculties are, practically, the possession of inheritance, the degree of perfection or accuracy with which the normal cell functionates is in proportion to its vitality, which is largely dependent on the quantity and quality of nourishment assimilated. As for the quantity, I hardly think the withdrawal of nutriment from the nerve-cells can directly and alone cause a disorganization of the functions of the cerebral cells, to the degree called insanity, but a large number of the cases of so-called nervousness are produced in this way. In regard to the quality of nutriment, certain toxic principles entering the circulation and carried in sufficient quantity to the psychic cells will overthrow their power of correct analysis or reasoning, and cause what I understand to be functional insanity. There is another factor in the pro-

duction of nervousness, by gynecic abnormalities, which I regard as too potent to be lost sight of, viz., the moral shock or effect produced on a patient by the recognition of the existence of an abnormal condition of her genital parts. I have seen this most severe in old complete lacerations of the perineum, where the total loss of the restraining function of the anal spincters acted as almost a constant reminder to the patient of her unfortunate condition.

A few words, at this point, may not be amiss on how impressions and conclusions are retained by the nerve-cells. If we admit, as we must, that these cells receive impressions, convert them into ideas and retain not only the primary impulse but also the idea, we must be prepared to accept the theory, as the most reasonable one so far presented, that there is produced a material change in the organized matter of each cell, every time it responds to an impulse, be it normal or abnormal impulse, and in accordance with the laws of direct cellular heredity, this material change passes, with decreasing distinctness, unless there is a repetition of the primary stimulus, through generation after generation of cells, until it is finally lost. While it is difficult for us to conceive of a material change in the nerve-cells to represent every experience, conscious, or unconscious, had by man, yet this is no harder task, nor is it more incredible than the crediting in the ovum of the mother and the spermatozoa of the father, some material representative of every class, if not of every cell, in the organisms of these respective individuals, and to deny this would be to destroy the theory of physiologic heredity and leave us in the confusion of ignorance. If we are correct in regard to the manner in which nerve-cells retain impressions and ideas, we have a physiologic explanation for the prognoses in nervous derangements, being largely

determined by the length of time the disorder has existed.

However much we would like to prosecute our studies in this inviting field, we must forego our inclination, and approach nearer the heart of our subject by considering the nervous connection between the genital parts and other tissues. Byron Robinson says the uterus has twenty or more nerve cords running to the solar plexus, and that it, of all organs, "has the most intimate and profound connection with the cerebrospinal axis and abdominal brain." "That the connection of the genital and urinary system with all the great nerve-centers is intimate and very large," I think anatomists and physiologists have proven beyond all question. If this is true, we have only to call to mind the laws of reflex action to understand how an irritation can pass from the genital system, through the hypogastric to the solar plexus, and by it be sent, with more or less force, over the numerous nerve-tracks to the viscera. As every impulse passing over a centrifugal nerve causes the cells which the nerve supplies to perform their characteristic function and as no cell, or set of cells, can properly discharge its duty without a period of rest, therefore, a more or less constant irritation from diseased genital tissue, traveling, as indicated above, to the viscera, will sooner or later overtax the cells concerned in the preparation of food, and thus cause an improper supply of nourishment to be furnished for assimilation. Being acquainted with the intimate connection between the sympathetic and the cerebrospinal nervous systems, and knowing the readiness with which an irritation may be transmitted by reflex action from one to the other, should we not be inclined at least to speculate on the possibility, if not the probability, of an irritation from the genital tissue traveling through the hypogastric or solar plexus to some of the higher cells of the cerebrospinal system, dis-

organizing their function to the extent of causing objective abnormal nerve manifestations?

With this mere summary of what appear to me to be plausible theories, I will report a few cases which have been under my care.

CASE 1.—Mrs. B., white, multipara, 40 years of age, nervous and eccentric, family history good, presented endometritis, incomplete laceration of the perineum of several years' standing, and relaxation of the posterior vaginal wall. Curettage, posterior colporrhaphy and perineorrhaphy were performed. The bowels were moved on the second day. On the third day nervousness began to increase, and continued to do so for a week, at the end of which time she was quite insane; suspicious of her family and attendants; speech irrational and disconnected; unable to recognize her surroundings; sleep little and disturbed. Bromid of soda, chloral and sulphonal were given at different times to promote rest, but had little or no effect. Her suspicions of evil designs on the part of her attendants caused a great deal of difficulty in giving nourishment, to say nothing of medicine. Efforts were chiefly directed toward keeping the skin, kidneys and bowels active. Digestion was very much impaired from the beginning. At the expiration of four weeks she began to improve and made a rapid and complete recovery. Result of operation good.

CASE 2.—Mrs. P., white, widow, multipara, 38 years of age, anemic and nervous, family history negative as to nervous disease, had complete laceration of the perineum ten years previous to coming under my care. A fibroid tumor the size of an orange was present in the soft tissue between the uterus and bladder. Menorrhagia and metrorrhagia were severe. Curettage and removal of tumor through the vagina was done. Ten days afterward the perineum was repaired. The bowels were moved by

purgative and enema, on the third day. Nervousness began to increase before the bowels acted and continued to do so until she became entirely irrational. The bowels were kept active, and nourishment and tonics freely administered. In the third week some mental improvement was noticeable, and by the sixth week she had entirely recovered. The result of the operation was good. The patient has gained in weight and at this time is in perfect health.

CASE 3.—Mrs. G., white, multipara, 27 years old, anemic and nervous, but with no family history of nervousness, was reported to have had "several fits." The perineum was completely lacerated at the first confinement, six years ago, but she had been in good health up to that times. Four unsuccessful efforts to repair laceration were made before she came under my care. I repaired the tear and the third day afterward moved her bowels. Her nervous condition showed a decided increase on the fifth day, and on the tenth day she was thoroughly irresponsible; constantly complained that some member of her family was dead; would get out of bed immediately on being left alone. Bromid of soda and sulphonal were used to cause sleep, but had no effect. The bowels were kept open and stimulants and nourishment freely administered. Digestion was very much impaired before and after operation. Mental improvement began at the end of the third week and continued to a complete and hasty recovery. The result of the operation was all that could have been desired. When last heard from her physical and mental health were good and there have been no more fits.

CASE 4.—Mrs. S. J., white, widow, multipara, 31 years old, no family history obtainable, anemic and nervous, presented endometritis, growths in the vagina and bladder, hemorrhoids and complete laceration of the perineum. I curetted, removed the growths from the

vagina and bladder and tied the hemorrhoids, and the patient progressed nicely. At the end of the second week, I repaired the lacerated perineum. The bowels were moved, as is my custom in these cases, on the third day. Nervousness was decidedly worse on the fifth day and on the ninth she had hysterical coma. The abnormal nervous manifestations continued, with more or less violence two weeks, when change for the better was recognized. The same general plan of treatment was adopted in this as in the preceding cases and recovery was complete in seven weeks. The perineum united perfectly and she has experienced good health since she was discharged.

CASE 5.—Mrs. S., white, married, 30 years old, multipara, gave history of her father, a drunkard; mother weak-minded, and one brother, about 20 years of age, very peculiar. The patient was anemic and nervous; her digestion was very poor; she had complete laceration of the perineum, bilateral lacerated and hypertrophied cervix uteri, and endometritis. I curetted, repaired the lacerated perineum, and amputated the cervix. This patient went through the same experience as those above reported. Her general health continued to improve after her return home, but her nervousness remained practically the same as it was before she was operated on. I lost sight of her for twelve months or more, but during the latter part of last year she was brought back to me in a very much impaired mental and physical condition, when I prescribed a tonic for her and advised that she be kept under close observation or sent to an insane asylum.

Here we have five patients, to all appearances similarly affected, and four recovered and are now enjoying good health, while the fifth improved in physical health, but experienced no decided or lasting effect on her nervousness, and is now, after a little more than a year, presenting alarming signs of complete mental derangement.

What were the factors in these patients acting as causes in the production of the nervousness before and the acute insanity after operation?

1. The knowledge of the existence of abnormal pelvic condition caused a more or less continued mental worry, which depressed the general vitality, and the function of digestion shared in the loss of force.

2. By reflex action abnormal nerve impulses were sent from the seat of the primary trouble to the abdominal viscera, disturbing their function more or less.

3. The slight mental and physical shock produced by the operation further lowered the vitality and impaired the power of digestion.

These, all combined rendered the intestinal tract incapable of doing its work, as a result of which fermentation took place in the intestines, producing toxic principles. These toxic principles, being conveyed in sufficient force to the already anemic psychic cells, rendered them incapable of correct reasoning. Another factor in the fifth patient was the inherited nerve weakness from both parents, which I believe is responsible for the present condition.

Case 6.—Mrs. J., white, married, 35 years of age, multipara, with good family history, had endometritis, bilateral lacerated and hypertrophied cervix uteri, and was anemic and nervous. She also suffered with dyspepsia and frequent attacks of intestinal colic, and experienced no appreciable improvement for several years of medicinal treatment. I advised curettage and amputation of the cervix, telling her, however, that I could not promise that the operation would prevent the intestinal colic; I could only say that it would relieve the local condition, which was probably partly responsible for her ill health. She submitted to the operation and remained at the infirmary about four weeks. Since her return home, several months ago, she has improved in

general health and has only had one attack of colic, whereas, before the operation she had them almost daily.

This is a case in which I think we are perfectly justifiable in saying that impulses were sent from the diseased uterus through the hypogastric to the solar plexus, and from the latter to Meisner's and also to Auerbach's plexus, the former regulating the secretions and the latter the peristalsis of the intestines. Thus both of these functions were disturbed, causing spasmodic intestinal pain and imperfect digestion of food. An improper supply of nourishment being furnished the system, anemia and nervous irritability developed.

CASE 7.—Mrs. P., white, married, multipara, 32 years old, very much reduced in health, was extremely nervous and irritable. She had one sister insane. Two years previous to her coming to me she had been confined to an insane asylum for three months. Vaginal examination revealed purulent ovaries and tubes, which were subsequently removed, without liberating the pus. The second day after the operationshe became violently insane, fought the nurses and made every effort to get out of bed, which was prevented only by force. An attendant had to be constantly by her to prevent her doing herself harm. No suppuration followed the operation and no elevation of temperature, except immediately following her struggles to get out of bed. Her mental condition showed signs of improvement in the fourth week, and at the end of the seventh week was practically as it was before the operation. Her general health improved very much. When last heard from, eight months after her discharge, she had again lost her mental faculties and her husband was preparing to send her to an insane asylum.

CASE 8.—Miss W., white, 12 years of age, father dead, and mother an epileptic, and mentally incapable of

caring for herself, was "led astray" and contracted gonorrhea. She had been confined to her bed several months previous to my being called to see her, was very much emaciated and complained of pain in her pelvic cavity. On examination I found her pelvis filled with an immovable mass. As the only means of saving her life, I proposed abdominal section, which readily received the sanction of her physician and herself. I opened the abdomen and found, as I had apprehended, numerous and dense intestinal and omental adhesions, which, on being separated, revealed a number of pus-pockets. The ovaries and tubes were suppurating foci, and I removed them, washed the pelvis out and inserted a gauze drainage. The patient made an uninterrupted recovery and was sent home. Two or three weeks later I was summoned to see her and she informed me that after eating she experienced "a lumping and griping in the lower part of her abdomen." This gradually increased, until there was almost a complete intestinal obstruction. I advised that the abdomen be opened for the purpose of relieving the intestinal obstruction by destroying the adhesions, which I was confident were responsible for the trouble. I knew that more adhesions would form, but hoped they would not constrict the bowels. After entering the abdomen and separating the constricting bands, I examined the ligatures placed on the pedicles at the previous operation and found no trouble from them. The patient made a good recovery and went home very much improved in health, and I am reliably informed that she continued in very good condition for a year or more, when she became acutely insane and died within a few weeks.

Individuals who, by reason of inheriting nerve-cells of limited capacity, require, when in comparatively good health, a discharge of the full force of their psychic

cells to perform their duties, are liable to have their mental functions disorganized by any conditions which tend to lower their vitality. Every major operation is attended with more or less shock, and the cessation—natural or artificial—of the function of the ovaries produces a decided impression on the nervous system. Therefore the operation, in the last two cases, may have added to the already existing tendency to mental incapacity; nevertheless, they were operations of necessity, and ordinarily, by removing the condition which was causing the ill health, should have ultimately strengthened the capacity of the psychic cells to discharge their duty.

The next Annual meeting of the Medical Association of the State of Alabama, will be held in the city of Montgomery on the third Tuesday in April, 1900, at 12 o'clock noon, continuing for four days.

Each county is entitled to send two delegates. The assessments upon the County Societies is ONE DOLLAR for each member, exclusive of Counsellors and Delegates, the former of whom pay A FEE OF TEN DOLLARS and the latter FIVE DOLLARS. Further particulars will be found in the Annual Circular Letter of the Secretary, to be issued March 1st, 1900.

On account of gathering further statistics the paper of Dr. W. H. Sanders on "The Late Epidemic of Yellow Fever" and the reply to it by Dr. Murray, of the Marine Hospital Service, will not appear in this volume, but as soon as completed will be issued as a supplement to the Transactions of 1899, and a copy will be mailed to all to whom the Transactions are sent.

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